CORA Cork Open Research Archive
Cartlann Taighde Oscailte Chorcaí

Title	An evaluation of the "FRIENDS for Life" programme among children presenting with autism spectrum disorder
Authors	Burke, Mary-Kate;Prendeville, Paula;Veale, Angela
Publication date	2017-09-15
Original Citation	Burke, M.-K., Prendeville, P. and Veale, A. (2017) 'An evaluation of the "FRIENDS for Life" programme among children presenting with autism spectrum disorder', Educational Psychology in Practice, 33(4), pp. 435-449. doi:10.1080/02667363.2017.1367648
Type of publication	Article (peer-reviewed)
Link to publisher's version	10.1080/02667363.2017.1367648
Rights	© 2017, Association of Educational Psychologists. This is an Accepted Manuscript of an article published by Taylor & Francis in Educational Psychology in Practice on 15 September, 2017, available online: https://www.tandfonline.com/10.1080/02667363.2017.1367648
Download date	2026-11-04 21:12:29
Item downloaded from	https://hdl.handle.net/10468/6562



UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

‘An evaluation of the ‘FRIENDS for Life’ programme among children presenting with Autism Spectrum Disorder’

Authors: Mary-Kate Burke [1 2], Paula Prendeville [2 3], & Angela Veale [1]

Affiliations:
[1] School of Applied Psychology, University College Cork, Ireland
[2] The Brothers of Charity, South Lee Autism Service, Cork, Ireland
[3] School of Education, University College Dublin, Ireland

Abstract

‘FRIENDS for Life’ (FRIENDS; Barrett, 2004) is a Cognitive Behavioural Therapy programme which aims to reduce anxiety and promote resilience among children. This study evaluated the efficacy of an adapted ‘FRIENDS' programme among seven children aged 10-11 years who presented with Autism Spectrum Disorder (ASD) and average or above cognitive ability. The study adopts a mixed methodology, explanatory research design, utilising pre and post quantitative anxiety scales, parental interviews completed post intervention, narrative observation of FRIENDS sessions and a post intervention children’s evaluation questionnaire. Quantitative findings from this study suggest that participation in the ‘FRIENDS’ programme does not reduce anxiety levels. Such results are discussed with regard to the utility in using standardised self-report measures among children with ASD. Despite this, qualitative information indicates that ‘FRIENDS’ can be made accessible for children with ASD. Recommendations and implications for future research and FRIENDS implementations are outlined.

Key words: FRIENDS for Life, CBT, Autism, intervention, resilience

Introduction

The aim of this study was to investigate the impact of an adapted 'FRIENDS for Life' (Barrett, 2004) programme among children aged between ten and eleven years of age presenting with Autism Spectrum Disorder and with average or above cognitive ability (see method section for adaptations). 'FRIENDS for Life' (hereafter referred to as FRIENDS) is a ten-week group programme, based on cognitive behavioural therapy (CBT) principles, designed to alleviate anxiety and promote emotional resilience for children aged between 7 - 11 years (Barrett, 2004). FRIENDS has been applied across the globe showing consistent positive support as both a universal anxiety prevention measure in schools (Stallard, 2010) and as an indicated intervention among small clinical samples (Liddle & Macmillan, 2010). In recent times, a randomised controlled trial of the FRIENDS programme in Irish schools identified positive outcomes for students that included improved emotional wellbeing, greater coping skills and an enhanced sense of connectedness with school (Ruttledge, Devitt & Greene et al. 2016). A single case experimental design was previously conducted with four children with Autism in a special school provision which identified a delayed effect on anxiety (Slack, 2013).

Autism and Anxiety

There is considerable evidence to suggest that children and adolescents with ASD are at increased risk of experiencing anxiety and anxiety disorders (Van Steensel, Bogels & Perrin, 2011). In fact, anxiety related difficulties are so frequently exhibited in children with ASD that the Diagnostic and Statistical Manual V (DSM V) highlight anxiety like responses as a common associated feature of autism (American Psychiatric Association, 2013). A recognised approach for the treatment of childhood anxiety is cognitive behavioural therapy (Pilling, Baron-Cohen, Megnin-Viggars, Lee, Taylor & Guideline Development Group, 2012). The FRIENDS programme uses a psycho-educational approach to teach children the relationship between thoughts, feelings and behaviour. It aims to teach children emotional recognition and management skills; to recognise cognitions in

anxiety-provoking situations; to challenge negative self-talk (red thoughts) and to teach positive coping skills and self-reward for positive attempts at overcoming worries.

Making CBT accessible for ASD

It has been suggested that the symptoms and characteristics associated with ASD may complicate the implementation of CBT procedures (Scattone & Mong, 2013). The success of CBT as an intervention is dependent on the individual's capacity to recognise different emotions and to accurately label and to discriminate between them (Willner, 2005). Accordingly, immature cognitive skills associated with ASD can make engagement with CBT a complex task. Such barriers include difficulties with regulating emotion, communication deficits (e.g. comprehension, literal interpretation) (Attwood, 2004), motivation, Theory of Mind (ToM) deficits (Baron-Cohen, 2000), concrete thinking (Anderson & Morris, 2006), therapeutic generalization across settings and cognitive inflexibility (Gaus, 2007).

Practically, Stallard (2005) suggests that children may be able to engage in some CBT programmes if the cognitive demands of the intervention are matched to the child's developmental capacity. Techniques for simplifying the CBT model suggested by Stallard (2005) include using concrete or visual cues and props, games and quizzes, storytelling, metaphor, puppets and presenting abstract concepts and strategies as concrete examples from real life. Other modifications highlighted by previous research include using Social Stories (Gray, 2010), associating emotions and tangible objects, highly structured and predictable sessions (Ozsivadkian & Knott, 2011), use of alternative communication modes (eg. internet chat), increased emphasis on coping strategies that do not require the use of abstract language (eg. relaxation strategies), increasing the focus on teaching social skills and multiple-choice rather than open ended questions (Attwood, 2004; Sung, Ooi, Goh, Pathy, Fung, Ang & Lam, 2011).

Evaluating FRIENDS among children with ASD

The ability of individuals with ASD to self-report internal mental states and to recognise and to label their emotions, necessary skills for CBT, has been the subject of considerable discussion (Lickel, MacLean, Blakeley-Smith & Hepburn, 2012). Ozsivadjian, Hibberd & Hollocks (2014) comment on potential difficulties that may manifest in children who self-report anxiety symptoms. Such difficulties have been associated with limited insight, rigidity in thinking, rapport with the rater in clinician administered assessments and/or inherent limited ability to reflect on internal states. In light of such difficulties, Charman, Howlin, Berry and Prince (2004) advocate the use of parents as informants when assessing the developmental progress of children with ASD across therapeutic programmes. In addition, Johnson and Turner (2003) propose that to strengthen the validity of children's self-report findings, research must impose critical application of a range of triangulated methods including multiple informants, appropriate to the research question.

Current Research Design

This study contributes to the existing evidence base in representing what the author believes to be a pilot investigation of the FRIENDS programme among children with ASD, carried out within a specialist Autism service. In addition, this small scale research design contributes to the literature by incorporating a mixed methods approach in its evaluation. Modifications made to the current programme derive from both the ASD and CBT literature and practice-based evidence from professionals working within the field of Autism. Adaptations made are described within the methodology section. The current study implemented a mixed methodology incorporating triangulation, gathering data from parents, children and researcher observations of FRIENDS sessions.

Research questions

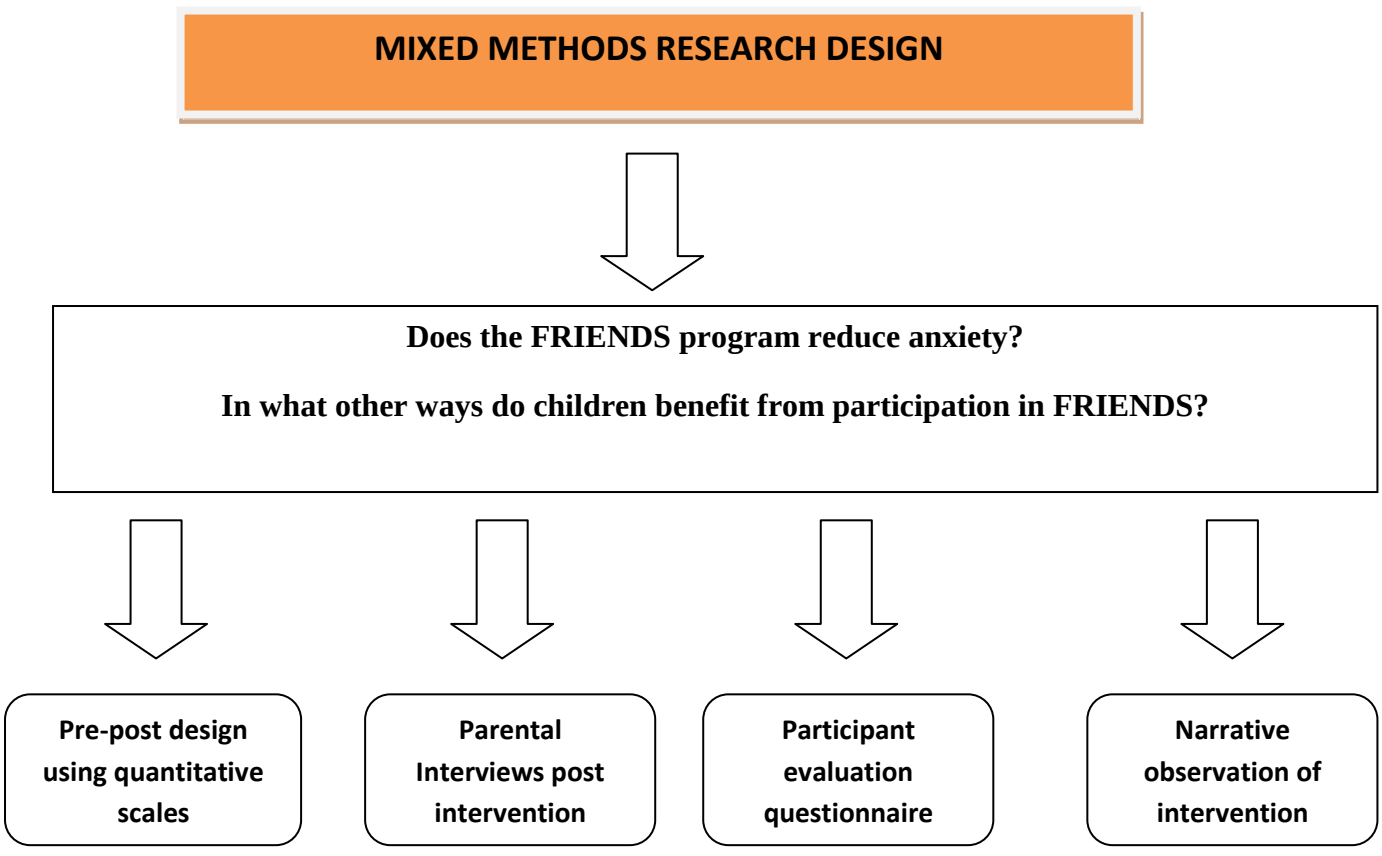
1) Quantitative evaluation: Does the FRIENDS intervention reduce anxiety among children with **ASD**?

2) Qualitative evaluation: In what other ways do children benefit from participation in the FRIENDS intervention programme?

Methodology

The current study represents a 'component design' where qualitative and quantitative data are collected separately but then combined during data synthesis and triangulation of results (Greene 2007). Using a pre-post design, the goal of the quantitative phase was to identify if any change occurred pre and post intervention regarding children's levels of anxiety using the Children Beck Youth Anxiety Self-Report Inventory (2005).

Figure. 1: Visual model of research design



In this measure, statements were presented to children, for example; *'I worry someone might hurt me at school'*. Items were scaled from 0 (never) to 3 (always) where the child must indicate how frequently a statement is true for them. To facilitate understanding and accuracy of rating, a child-friendly explanation of the concept of frequency terms: 'never, sometimes, often or always' accompanied each scale, in addition to a structured description of how to complete each scale.

Qualitative data were collected through observations of sessions, parental semi-structured interviews and children's course evaluation questionnaires. Evaluation of the programme solely by means of pre and post measures may miss some vital contextual processes indicative of change, across the intervention (Green, 2013). Narrative observation of FRIENDS sessions was deemed an important source of evaluative data. Children's evaluation forms were presented with an adapted likert-based rating scale using visuals. This was facilitated owing to previous research recommending a visual task analysis approach for children with ASD (Attwood, 2004).

Q1) Put a tick under the smiley face which best represents your experience of the programme

				
Really enjoyed it	I liked it	Not so sure	Did not enjoy it	Really did not enjoy it

Figure 2: Sample of the child friendly evaluation form

Method

Participants: Purposive sampling was employed to ensure a homogenous sample. The inclusion criteria were: 1) A diagnosis of Autism Spectrum Disorder confirmed by multidisciplinary team (MDT) using best practice guidelines from the National Institute for Clinical Excellence (Baird, Douglas & Murphy, 2011), 2) availing of a specialist MDT service, 3) attending mainstream school, 4) average or above intellectual ability and 5) identified and referred for anxiety

intervention by psychologist. Semi-structured parental interviews post intervention were completed with five mothers and one couple (mother and father) who were all of Irish heritage.

Procedure: Intervention was delivered using FRIENDS programme manuals and workbooks (Barrett, 2004). The programme consisted of 10 weekly sessions, two hours in length. Two parent evenings were delivered and one teacher information evening. Prior to FRIENDS, each parent was invited to an information evening. Prior to FRIENDS, parents were given pictures of the immediate FRIENDS environment, the facilitators and location of the service. This was completed in order to facilitate a child-friendly assent process, aimed to ease children's initial engagement with the programme and to support a structured transition process. The Beck Youth Anxiety Scale (BAI-Y) was selected as a suitable measure as it demonstrates strong internal reliability (.86 to 0.96; Beck, 2005) and robust convergent validity with 33 discrete anxiety measures (Bardhoshi, Kelly & Bradley, 2016).

Adapting FRIENDS for an Autism Population

The FRIENDS manual (Barrett, 2005) accepts that facilitators may need to modify course presentation depending on the needs of the group. Adaptations to the programme were based on evidence from the literature in adapting CBT programmes for children with ASD (Attwood, 2004) in conjunction with practice-based evidence within the Autism service (see table 1 below).

Table 1: Summary of Adaptations made to FRIENDS

Adaptation	**Description**
Environmental Description	The FRIENDS environment was ecologically adapted to harness engagement for children with ASD. Five distinct environmental zones were created each with its own function; 1) The Practice Zone (group activities and course), 2) The Calm Zone (relaxation area, included bean bag, sound deadening ear phones, relaxation mat and tactile stimulation equipment), 3) The Sensory Zone (included trampoline, exercise ball, therapy bands and visually displayed instructions for sensory exercises), 4) The Eating Zone and 5) The Garden Zone (outdoor activities and play zone).
Transition Activity	The 'Transition Activity' facilitated children's gradual integration to the group, upon arrival. Each week a structured activity was put in place where children could engage in a structured task to reduce their anxiety eg. lego, colouring, arts and crafts.
Emphasis on Visuals/Structure and Routine	The daily agenda and rules were visually displayed to reinforce predictability, structure and routine. Visual communicative aids were provided such as the 'Boogie Board'.
Sensory Strategies	In response to children's sensory needs, movement breaks and sensory tools were provided at each session, including various tactile objects such as therabands, theraputty and exercises recommended by Occupational Therapy Department.
Puppets and Props	FRIENDS incorporated the implementation of regular puppet shows where both facilitators and children would interact in the creation of scripts and role plays centred on course material.
Theory of Mind	Emphasis on ToM (Baron-Cohen, 2000) during all course objectives. Emphasis on feelings in others and recognising feelings in oneself, facilitators verbalising thoughts and feelings constantly to help social interaction between children (eg. how do you think that made John feel when you did that?)

Data Analysis

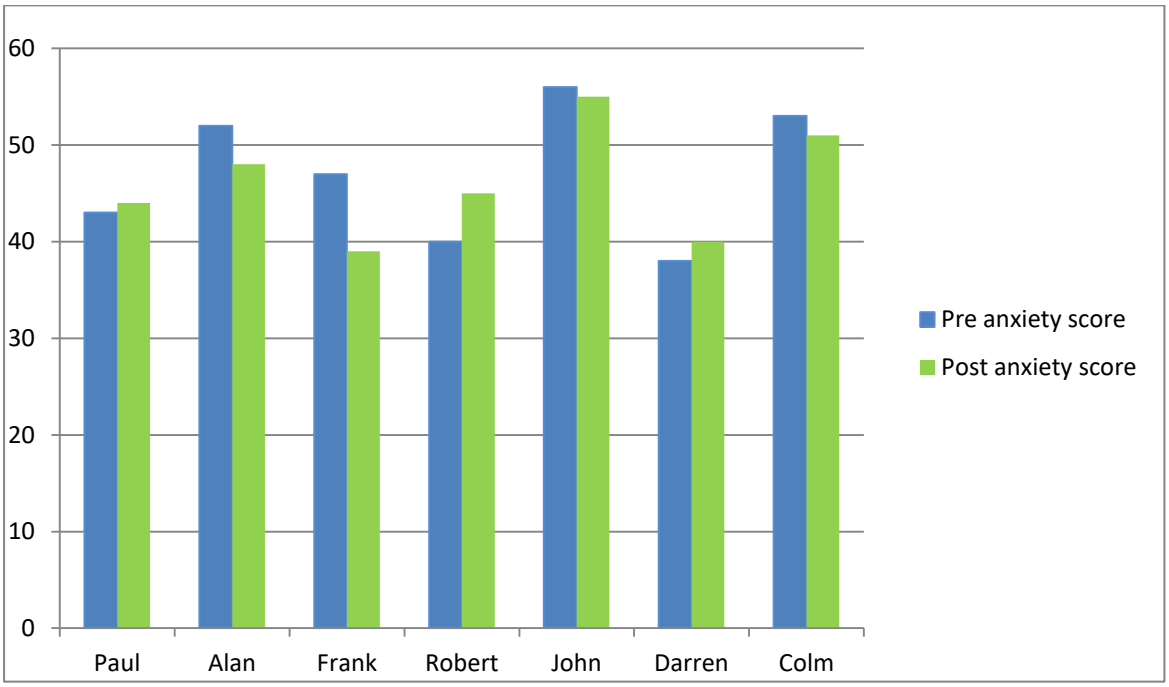
Anxiety scales were scored manually following scoring and interpretive procedures outlined in the Beck (2005) manual. Owing to the small sample, statistical analysis was not possible. Comparisons pre and post intervention were based on each child's pre and post anxiety/resiliency 'clinical range' score (Field, 2009). Thematic analysis (Braun and Clark, 2006) was applied to interview data. Observations were analysed using narrative analysis which allowed the observations to retain their 'storied text' (Riessman, 2008). Observation and interview data were later integrated and constantly compared as themes from both observational and interview data emerged. A thematic map of analysis was generated which represented children's experience of attending FRIENDS. During analysis, quality assessment was conducted by the researcher through constant revision of the raw data at each stage of the analysis process. The researcher also engaged in peer debriefing (Long & Johnston, 2000) and weekly memo writing weekly (Birks, Chapman & Francis, 2008), to ensure data credibility and trustworthiness of the data.

Quantitative Findings

1) Did FRIENDS reduce anxiety?

This question was addressed by the implementation of pre/post measures of the Beck Youth Inventory Anxiety Scale (BAY-I). Scores from the anxiety scale are presented in figure 3 below. Pseudonyms are applied for each participant. Of the seven children who participated, only one (John) self-reported 'mildly elevated anxiety symptoms' before engaging with the FRIENDS programme. Post intervention, this child remained within the same range. All other children (n=6) presented within the 'average range' of anxiety pre and post intervention. Such findings were inconsistent with initial parental and clinician referrals for an intervention to combat anxiety.

Figure 3: Summary of Anxiety Scores for all children at Pre- and Post- Intervention (T scores less than 55 in the average range, 55-59 mildly elevated, 60-69 moderately elevated)



Children's Evaluation Questionnaire

On the final day of FRIENDS, children completed an anonymous programme evaluation (N=7). Below is a summary of the findings from the evaluation questionnaire.

1) How much did you enjoy the FRIENDS programme?

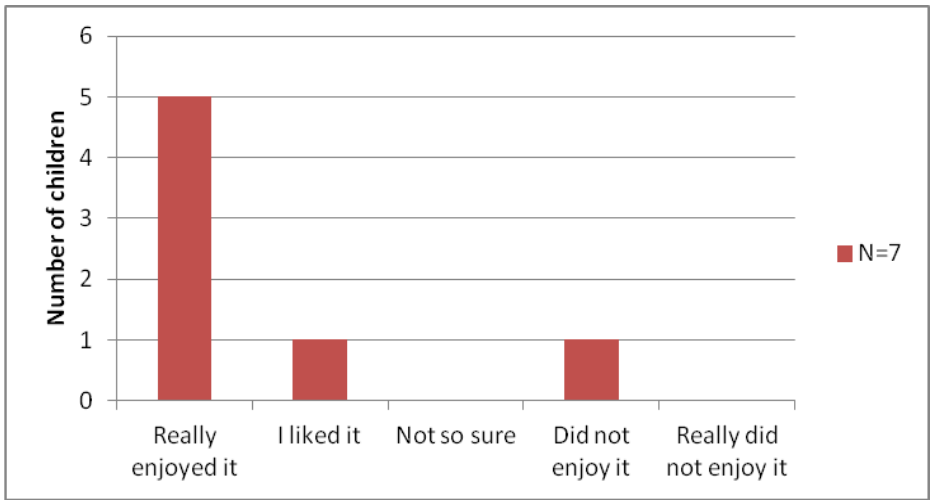


Figure 4: Children's reported enjoyment of their participation in the FRIENDS intervention

2) How much did you learn about your feelings?

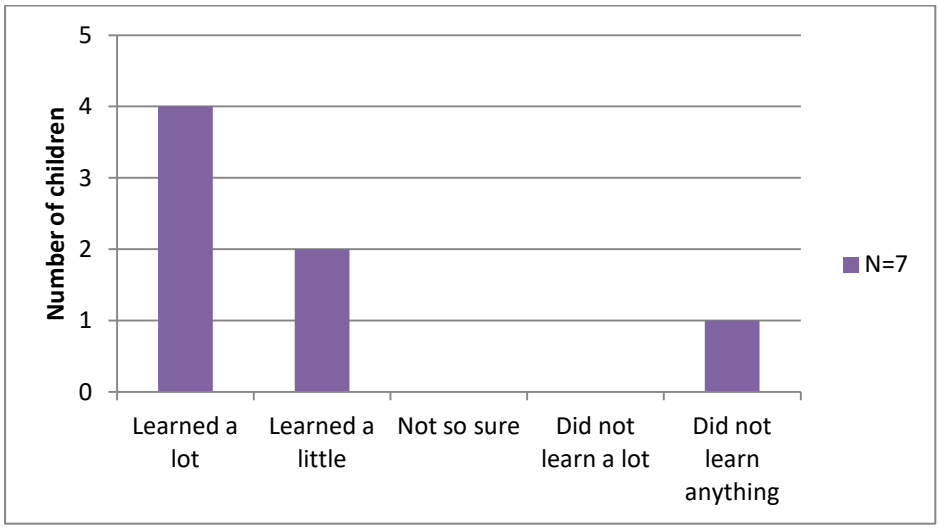


Figure 5: Children's reports on how much they learned about their feelings

3) How often do you use the skills you learned from the FRIENDS programme?

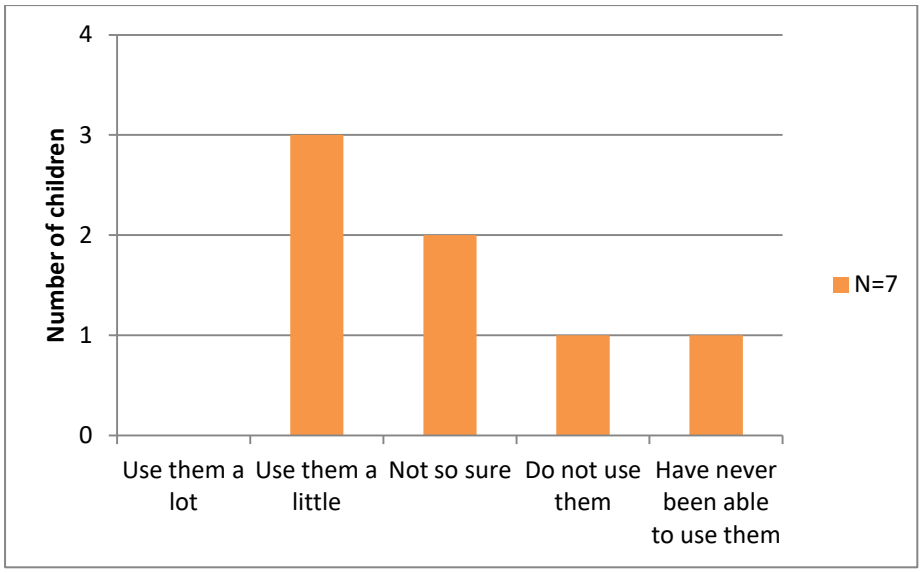


Figure 6: Children's reports on the transfer of the FRIENDS skills

In Table 2 below, the children rated how helpful specific FRIENDS activities were (number in each box indicate the number of children who ticked that particular response).

Table 2: Children's ratings of specific FRIENDS strategies

Activity	Found really helpful	Found helpful only sometimes	Not so sure	Did not find helpful	Really did not find helpful
Relaxation	3	3			1
Deep breathing	2	3	1		1
Thinking helpful thoughts	3	4			
Changing red-green thoughts	4	2	1		
Coping step Plan		4	2		1
6 block problem solving plan	3	2	2		1
Recognising feelings in yourself	3	1	2		1
Recognising feelings in others	3	2	1		1

Summary of findings from children's evaluation questionnaire

Feedback from children post intervention was favourable where 85% reported that they would engage in the FRIENDS programme again. 71% of children identified that they 'really enjoyed' the programme while one child (14%) noted that he 'liked it'. One participant (14%) reported that he 'did not enjoy it' and also reported that he did not benefit from skills taught. Children commented on making new friends and learning new skills where 57% of children noted that they had 'learned a lot' about their feelings and how they would cope when they were feeling worried or upset. Interestingly, almost half of the participants (43%) stated that they used the FRIENDS skills 'a little' outside of the FRIENDS programme. However, no child reported to use the skills frequently outside of the programme. 57% of the group stated that they found the 'coping step plan' helpful as a strategy only some of the time, while no child reported it being 'really helpful' to him as a strategy.

Although all parts of the programme were reported as useful, it was the '*changing red thoughts to green thoughts*' FRIENDS skill that participants identified as most useful to them. This core skill represents a central cognitive aspect of the CBT programme. The qualitative aspect of the evaluation form allowed children to describe what they liked most about the this programme. The following represent some of the responses received: *I liked the way I met a lot of friends most, but overall..I really enjoyed it!', 'The puppet show', 'Meeting new friends', 'The food the friends the fun'*.

Findings from Parental Interview and Observations

During interviews, parents were asked to discuss their child's participation in FRIENDS and to reflect on whether they had observed any noticeable change over the course. The following four themes were identified through integration of data from interviews and observations, following analysis.

Table 3: Four core themes identified from thematic analysis

Four core themes emerged following analysis

1) WHY CHILDREN WENT TO FRIENDS 1a) Surviving at school 1b) Dysfunctional coping	2) THE IMPACT OF FRIENDS 2a) Change in coping strategies 2b) Increasing positivity and communication 2c) Formation of bonds and building confidence
3) FACTORS PROMOTING ENGAGEMENT 3a) '*A sense of belonging'* 3b) The use of puppets	4) BARRIERS TO PROGRAMME ENGAGEMENT 4a) FRIENDS being generalised 4b) FRIENDS as a secret

Theme 1: Why children went to FRIENDS

1a) Surviving at School

When asked to discuss their child's experience of anxiety prior to commencement of this intervention, all six parents described in detail the difficulties their child faced attending mainstream schools. Common issues for all children were reported that included their

experiences of social isolation, exclusion, difficulties in forming friendships, low self esteem and bullying. One parent commented:

> *''the things that would stress him would majority happen in there because he knows he doesn't fit in there and I think he walks in every day very conscious of that fact and not at all confident in himself'* (Alan's mother)

Five out of six parents described their son as trying to fit into a world which each child believed they did not belong to.

1b) Dysfunctional coping

Parents reflected on their son's difficulty with emotional regulation. Anecdotes from parents described their child becoming overwhelmed by his own anxiety which was manifested in dysfunctional coping patterns. Two parents disclosed the numerous times schools had contacted them regarding emotional/behavioural breakdowns their child experienced in their school setting.

> *'he was coming home, he was having meltdowns..he refused point blank to go outside'* (Colm's mother)

In other more extreme cases, parents described their son's experience of anxiety in terms of their child's presentation of low self esteem, aggressive behaviour, self harm and depressed moods evident in the home setting.

Theme 2: The Impact of FRIENDS

2a: Change in coping strategies

Regarding school behaviour, three parents noted that they had received fewer phone calls from the school regarding behavioural difficulties since the programme started. Paul's mother

noted changes such as -*'a lot less outbreaks'*, showing greater ability to detect the early warning signs of anxiety -*'he's getting in-front of the problem now'*.

Another notable impact was also identified by Alan's mother who described her son as demonstrating greater ability to cope against adversity at school, following the FRIENDS intervention.

'They have all found him now even being able to ask for help..being able to go to the teacher...which he never would have before, he either would have tried to deal with it himself or would have completely withdrawn' (Alan's mother)

While Alan's change in coping ability is profound, equally two other parents noted at least one positive coping strategy (including relaxation, challenging negative thinking), had been applied in the home setting.

2b: Increased positivity and communication

Two parents reported a changed attitude with increased positivity as one of the central impacts of the programme. For instance, Colm's mother disclosed that her son displays a much more positive outlook and increased self confidence now:

'I have noticed him being a lot more positive now whereas he used to blame himself for a lot of things'

For another child, the central benefit was that it allowed him to see the importance of verbalising how he feels.

'I would say be benefitted from it and we can now talk about things..and we can talk to him about different things that he can do to try and de-stress himself' (Frank's parent)

In this unique case, the programme impacted the parent-child dyad providing an impetus for increased communication and discussion of coping options. Frank's progress is particularly notable considering he did not speak for the first four weeks of the FRIENDS programme, relying on the visual sketchpad ('Boogie Board') to communicate.

2c: *Formation of bonds and building self confidence*

Throughout the ten weeks it was clear from the researcher's field notes that positive relationships had developed between some of the children. Children became more aware of their shared interests as friendships became generalised outside of the group based on common interest such as computer gaming:

'*they're constantly on skype...constantly! So like the group was amazing for him that people liked him and thought he was cool..I love that for him...he wouldn't be used to anything like that in school'* (Darren's mother).

Both parents noted that both Alan and Darren demonstrated greater confidence; *'it's like he's after coming out of his shell'*. For instance, Alan was described by his mother as becoming increasingly aware of his own personal strengths, learning to differentiate himself from his brother in the establishment of his own identity:

'I think he has learned he has his own... his own personality that he can bring forward..learned to focus on himself more instead of wishing he could be like his brother' (Alan's mother).

Theme 3: Factors Promoting Engagement

3a: 'A sense of belonging'

One parent described the '*sense of belonging'* the group provided the boys. They entered a safe haven where each child felt accepted. Parents doubted whether such group cohesion could have been replicated within the mainstream school environment with neurotypical peers. This point was reiterated across four separate interviews as parents commented on a shared understanding and affinity children felt with one another. Analysis of field notes across the ten weeks intervention period also documented the sense of positive group morale and cohesion which developed. For instance, when one child missed a FRIENDS session, a welcome back poster was drawn upon his return.

3b: The use of Puppets

FRIENDS incorporated the implementation of regular puppet shows where both facilitators and children interacted in the creation of scripts and role plays centred on course material. Within this study, the puppets not only functioned as a projective tool for course content, but also provided children an accessible means to form relationships and interact with group members. Each week, upon arrival, children would gravitate towards the puppets using them as a tool to engage with the other children. Notable quotes created by children were displayed on the walls following each play. The success of the puppets was echoed in the children's positive responses to them; '*Can Paddy the puppet come back for the next session? Can we have another show?".*

Theme 4: Barriers to programme engagement

4a: Generalising FRIENDS

All six parents noted that they did not feel equipped to continue the FRIENDS skills at home when the course ended. Parents noted that their own lack of knowledge and involvement throughout the intervention was at times frustrating and inhibited parents from being able to practise FRIENDS skills between course sessions. This inherent barrier presented a threat to the generalisation and maintenance of programme impact. One parent noted that her son felt the programme did not deal with issues specific to him making it difficult for him to generalise coping strategies to issues presenting outside the programme:

'he was very negative about the scenarios that were picked, they weren't specific to him..he couldn't go from the specific out to his own' (John's mother).

Similarly, Paul's mother noted that despite demonstrating great understanding of course content, during moments of distress, her son was unable to apply the coping skills he learned. One parent recommended that prior to programme commencement, each child's specific sources of anxiety should be identified and honed in on during the course, thereby making content directly relevant to the group.

4c: FRIENDS as a secret

Two children in the programme stigmatised their association with the FRIENDS programme, wanting to keep it a secret from their peers at school. Such a finding highlights a stigmatised self awareness of their diagnosis and points to an increased sensitivity which should be considered upon delivering indicated programmes among this population.

Discussion

This study contributes to the existing literature on an evaluation of the FRIENDS programme among children with **ASD with average or above cognitive ability**. Findings suggest that FRIENDS can produce a positive impact on children's lives; however, the significance of this impact may not be captured by quantitative measures alone. The present study incorporated a triangulated approach gathering data from children, parents and programme observation which functioned to create a holistic picture of children's experience of attending the FRIENDS intervention. Assimilating the qualitative information from both interview and observational data, findings suggest that group-work supported children in various ways, impacting on each child differently. Overall FRIENDS was found to support emotional expression, foster a sense of belonging, increase confidence and positivity, reduce social isolation, support the formation of friendships and enhance family communication regarding strategies to combat distress among this group. Such positive benefits demonstrate important processes which play an integral role in fostering children's emotional resilience and coping capacity (Barrett, 2005).

Contrary to qualitative investigation, quantitative data gathered indicate that children's levels of anxiety remained largely unchanged pre and post intervention consistent with previous research (Slack, 2013). Such findings contrast with previous FRIENDS evaluations among typically developing children (Briesch et al. 2010). Moreover, discrepancy was found between children's self-reported emotional state versus both clinician and parent reports, where children were found to under-report the degree of their own anxiety. The discrepancy which emerged across the triangulated informants, namely parent, child and clinician, has also been identified within the literature among children with ASD (White, Schry & Maddox, 2012).

There are two possible explanations which might account for this finding. Firstly, it may be that the scales used to assess anxiety among this population did not demonstrate accurate construct validity**,** a proposal identified within the literature (Ozsivadjian, Hibberd & Hollocks, 2014). Other interpretations of these inconsistencies focus on the difficulties with insight, poor emotion recognition and rigidity in thinking associated with ASD (Lickel et al. 2012).. An account in support of this suggestion came from one mother who doubted her son's capacity to self-report his own anxiety symptoms. Even though children did not self-report clinically significant anxiety levels, each child completed a child friendly informed consent process and were interested in engaging with the intervention process. However, if we are to assume that children lacked the metacognitive and reflective capacity to accurately self report emotional states, it brings to light another important question; Can children with ASD understand and benefit from CBT? Children's evaluation of FRIENDS was favourable with six out of seven children reporting that they enjoyed the experience, had made new friends and would come again. While all skills within the programme were reported as useful, 'challenging negative thinking', a central cognitive CBT skill, was reported by children as the most useful skill learned. Such a finding provides evidence to suggest that children were willing and able to understand CBT principles within the FRIENDS programme.

Recommendations for Educational Psychologists

Results of this research study demonstrate practical and empirical significance. Findings of this study contribute to the evidence-base surrounding the use of CBT among children with ASD. Moreover, at a clinical level, findings suggest that standardised group CBT interventions may indeed be made accessible for children with **ASD** through the implementation of evidence based strategies to promote engagement. Future research is needed among much larger populations and with a much wider ASD heterogeneity, to further investigate the accessibility of such programmes for this population. Secondly, findings

recommend caution in the use of standardised evaluative tools among this sample to measure psychological constructs such as anxiety and resilience. The implications of such findings present both clinical and academic significance, considering that previous FRIENDS evaluations among selective and indicated populations have utilised self report anxiety measures as a means to screen children for intervention (Barrett et al. 2006). To counteract the difficulties which presented surrounding the use of self report scales, an alternative evaluation may incorporate the use of observational comparisons between baseline and post intervention behavioural disturbance which are associated with problems of anxiety (for example, frequency of aggressive or ritualistic behaviours). The success of puppetry in engaging children with CBT was a notable finding of the present study, a finding which is congruent with the literature (Stallard, 2005). Within the current study, puppets not only functioned as a projective tool for course content, but also provided children an accessible means to form relationships and to interact with group members. Having observed the positive impact the use of puppetry made in engaging children with the programme, further research which investigates the use of puppetry in eliciting children's perspectives may provide a valuable contribution towards future intervention evaluations.

Barriers to generalisation of core FRIENDS skills outside of the therapeutic context, presented an area of difficulty among the sample. Such a finding is congruent with previous research (Anderson & Morris, 2006), where the cognitive rigidity associated with ASD has been identified as the leading cause of such transferral difficulties. This finding points to the need for future research to investigate ways of supporting children with ASD in generalising therapeutic skills across varying contexts, particularly in schools where the FRIENDS intervention is used (Ruttledge et al. 2016). In further support of this finding and in following recommendations posed by parents, parental education of programme content and continuing connections with school staff during the intervention period is recommended when

implementing the FRIENDS programme among this sample, to aid generalisation and maintenance effects. While it is not possible to generalise regarding the efficacy of FRIENDS in reducing anxiety from this small scale research, what the current study does provide is a real life account of the potential impact participation in an adapted FRIENDS programme may provide for children presenting with ASD.

References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (DSM-5®)*. American Psychiatric Pub.

Anderson, S. & Morris, J. (2006). Cognitive behaviour therapy for people with Asperger Syndrome. *Behavioural and Cognitive Psychotherapy*, 34(03): 293-203.

Attwood, T. (2004). Cognitive behaviour therapy for children and adults with Asperger syndrome. *Behaviour Change*, 21(03): 147-161.

Baird, G., Douglas, H. R., & Murphy, M. S. (2011). Recognising and diagnosing autism in children and young people: summary of NICE guidance. *BMJ*, *343*(d6360), 10-1136.

Bardhoshi, G., Duncan, K., & Erford, B. T. (2016). Psychometric Meta-Analysis of the English Version of the Beck Anxiety Inventory. *Journal of Counseling & Development*, *94*(3), 356-373.

Baron-Cohen, S. (2000). Theory of mind and autism: A review. *International Review of Research in Mental Retardation*, 23: 169-184.

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

Barrett, P. M. (2004). Friends for life group leader manual–canadian edition. *Victoria, Canada: Queens Press*.

Barrett, P.M., Farrell, L.J., Ollendick, T.H. and Dadds, M. (2006). Long-term outcomes on an Australian universal prevention trial of anxiety and depression symptoms in children and

youth: an evaluation of the FRIENDS program. *Journal of Clinical Child and Adolescent Psychology, 35(*3): 403-411.

Beck, J. S. (2005). Beck Youth Inventories—Second edition for children and adolescents manual. *TX: Harcourt Assessment*.

Birks, M., Chapman, Y. & Francis, K. (2008). Memoing in qualitative research probing data and processes. *Journal of Research in Nursing,* 13(1): 68-75.

Braun, V. & Clark, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology,* 3(2): 77-101.

Charman, T., Howlin, P., Berry, B. & Prince, E. (2004). Measuring developmental progress of children with Autism Spectrum Disorder on school entry using parent report. *Autism,* 8(1): 89-100.

Field, A.P. (2009). *Discovering statistics using SPSS: and sex and drugs and rock 'n' roll*. London: Sage Publications.

Gaus, V.L. (2007). *Cognitive-behavioral therapy for adult Asperger syndrome*. New York: Guilford Press.

Gray, C. (2010). *The new social story book.* Arlington TX: Future Horizons.

Greene, J.C. (2007). *Mixed methods in social inquiry.* San Francisco: Jossey-Bass.

Green, S. L. (2013). *An evaluation of a FRIENDS for Life programme in a mainstream secondary school and its impact on emotional distress, anxiety and coping skills* (Doctoral dissertation, University of Nottingham).

Johnson, B. and Turner, L.A. (2003). Data collection strategies in mixed methods research. *Handbook of mixed methods in social and behavioral research*, 297-319.

Lickel, A., MacLean, W.E., Blakeley-Smith, A. & Hepburn, S. (2012). Assessment of the prerequisite skills for cognitive behavioral therapy in children with and without autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 42(6): 992–1000.

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

Long, T. & Johnson, M. (2000). Rigour, reliability and validity in qualitative research. *Clinical Effectiveness in Nursing*, 4(1): 30-37.

Ozsivadjian, A., Hibberd, C. & Hollocks, M. J. (2014). Brief report: the use of self-report measures in young people with autism spectrum disorder to access symptoms of anxiety, depression and negative thoughts. *Journal of autism and developmental disorders*, 44(4): 969-974.

Ozsivadjian, A. & Knott, F. (2011). Anxiety problems in young people with autism spectrum disorder: a case series. *Clinical Child Psychology and Psychiatry*, (16)2: 203-214.

Ozsivadjian, A., Knott, F. & Magiati, I. (2012). Parent and child perspectives on the nature of anxiety in children and young people with autism spectrum disorders: A focus group study. *Autism*, 16(2): 107–121.

Pilling, S., Baron-Cohen, S., Megnin-Viggars, O., Lee, R., Taylor, C., & Guideline Development Group. (2012). Recognition, referral, diagnosis, and management of adults with autism: summary of NICE guidance. *BMJ*, *344*, e4082.

Riessman, C.K. (2008). *Narrative methods for the human sciences*. London: Sage.

Ruttledge, R., Devitt, E., Greend, G., Mullany, M., Charles, E., Frehill, J. & Moriarty, M. (2016). A randomised controlled trial of the FRIENDS for Life emotional resilience

programme delivered by teachers in Irish primary schools. *Educational and Child Psychology, 33*(2), 69-89.

Scattone, D. & Mong, M. (2013). Cognitive Behaviour Therapy in the treatment of anxiety for adolescents and adults with Autism Spectrum Disorders. *Psychology in the Schools*, 50(9): 923-935.

Slack, G. (2013). *An Evaluation of the FRIENDS for Life Intervention with an Autism Spectrum Population: Evaluating the Impact on Children's Anxiety*. Doctoral Thesis, University of Nottingham, UK.

Stallard, P. (2005). *A Clinician's Guide to Think Good-Feel Good: Using CBT with children and young people*. West Sussex: John Wiley & Sons.

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

Sung, M., Ooi, Y.P., Goh, T.J., Pathy, P., Fung, D.S., Ang, R.P. & Lam, C.M. (2011). Effects of cognitive-behavioral therapy on anxiety in children with autism spectrum disorders: a randomized controlled trial. *Child Psychiatry & Human Development*, 42(6): 634-649.

White, S.W., Schry, A.R. & Maddox, B.B. (2012). Brief report: The assessment of anxiety in high-functioning adolescents with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 42(6): 1138–1145.

Willner, P. (2005). The effectiveness of psychotherapeutic interventions for people with learning disabilities: a critical overview. *Journal of Intellectual Disability Research*, 49(1), 73-85.

van Steensel, F.J., Bögels, S.M. & Perrin, S. (2011). Anxiety disorders in children and adolescents with autistic spectrum disorders: A meta-analysis. *Clinical child and family psychology review*, 14(3), 302-317.