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Psychosocial Intervention

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A Feasibility Evaluation of the Incredible Years® School Readiness Parenting Programme

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ABSTRACT

Parental involvement in their children's education, including activities undertaken by parents at home and through strong links with their children's schools, contributes to children's academic attainment. This study examined whether it was feasible for school-based staff to deliver the Incredible Years® School Readiness parent programme (IY-SR) in schools, its acceptability to parents and teachers, its impact on home-school relationships, and preliminary programme impact. Thirty-two parents with a child in a nursery or reception class were recruited from eight schools. Group leaders and parents gave positive feedback about the programme and parental attendance on the programme was high. There were also significant increases in parents' use of praise and children's positive responses. This is the first study to demonstrate the feasibility of engaging schools to deliver the IY-SR programme as a means of promoting home-school relationships and providing parents with the skills to coach their children's school readiness skills.

La evaluación de la viabilidad del programa para la mejora de las habilidades parentales *Incredible Years® School Readiness*

RESUMEN

La implicación de las figuras parentales en la educación de sus hijos e hijas, incluyendo las actividades llevadas a cabo en el hogar, y una buena relación familia-escuela, contribuye al rendimiento académico de los niños y las niñas. Este estudio evalúa la viabilidad de la implementación del programa *Incredible Years® School Readiness* (IY-SR), su aceptación por parte de las familias y de los maestros y las maestras, su impacto en la relación familia-escuela y los resultados preliminares de su efectividad. Treinta y dos figuras parentales con hijos e hijas en guardería o en escuela infantil fueron captadas en ocho centros. Los dinamizadores y las figuras parentales mostraron una respuesta positiva hacia el programa y la asistencia de las familias a este fue alta. Además, se incrementó el uso de elogios por parte de las figuras parentales y las respuestas positivas de sus hijos e hijas. Este es el primer estudio que demuestra la viabilidad de involucrar a los centros educativos en la implementación del programa IY-SR como medio para promover la relación familia-escuela y capacitar a las figuras parentales para fomentar las competencias de sus hijos e hijas en su preparación para la escuela.

Recognition that positive parenting practices buffer the negative effects of socioeconomic disadvantage by promoting important early cognitive, social, and language development in children (Whittle et al., 2017) has prompted a number of government initiatives for parents of pre-school children, both in the US (Head Start; US Department of Health & Human Services, Administration for Children & Families, 2005) and in the UK (Sure Start; Belsky, Barns, & Melhuish, 2007). However, despite evidence of the effectiveness of these programmes, up to 30% of children fail to meet typical developmental milestones in communication and language, personal, social, or emotional development at age five (Action for Children, 2016). Consequently,

growing numbers of children are starting school without the essential language, self-regulation, and social school readiness skills that predict longer term academic success (Nursery World, 2017). This is particularly the case for children living in poverty or with other aspects of social disadvantage (Blair & Raver, 2014; Hair, Hanson, Wolfe, & Pollak, 2015; O'Connor, O'Connor, Quach, Vashishtha, & Goldfeld, 2018) with gaps in achievement between disadvantaged children and their more privileged equivalents clearly established by age 5 (Ofsted, 2014). This represents a public health concern as poor cognitive and social/emotional development at age 5 has a strong influence on future outcomes including academic

underachievement, poor mental and physical health, reduced social skills, and unemployment (Alborz, Pearson, Farrell, & Howes, 2009; Blair & Raver, 2014; Jones, Greenberg, & Crowley, 2015).

Schools recognise the need to develop children's school readiness skills and a number of government curriculum developments, such as the Foundation Phase (Wales; see https://gov.wales/foundation-phase-action-plan) or Early Years Foundation Stage (England; see https://www.gov.uk/early-years-foundation-stage), seeking to promote these essential skills during children's early school years. The school Personal Social Education (PSE; see https://hwb.gov.wales/curriculum-for-wales-2008/key-stages-2-to-4/personal-and-social-education-framework-for-7-to-19-year-olds-in-wales) curriculum in Wales and the Personal Social and Health Education (PSHE; see https://www.gov.uk/government/publications/personal-social-health-and-economic-education-pshe) curriculum in England also focus on children's emotional regulation, social relationship, and problem-solving skills. In the UK, a number of evidence-based programmes develop these skills, including the Incredible Years Dinosaur School (Webster-Stratton, 2011), PATHS (Promoting Alternative Thinking Strategies; Kusché & Greenberg, 1994), and Positive Action (Washburn et al., 2011) programmes. These programmes use intensive curriculum-based learning to teach emotion regulation, social, and problem-solving skills to primary school-aged children using behavioural strategies such as modelling, role-playing, and discussions. However, whilst these strategies and programmes support children in school, encouraging parents to be involved in their child's education can be challenging for schools (Education Endowment Foundation, 2019).

Parental involvement in their children's education independently benefits children's learning outcomes (e.g., Galindo & Sheldon, 2012; Wilder, 2014). In a meta-synthesis of the literature, Wilder (2014) found a positive relationship between parental involvement and children's academic outcomes, regardless of the definition of parental involvement. Most parents want the best educational outcomes for their children and many parents would like more opportunities for involvement with their child's school (Peters et al., 2008). This is strongest amongst disadvantaged groups for whom children's academic outcomes can be less good (Herbers et al., 2012) and Peters et al. (2008) conclude that work is needed to increase parental involvement with their children's school.

School practices can influence parental involvement in their children's education (Green, Walker, Hoover-Dempsey, & Sandler, 2007; Povey et al., 2016) with socio-economic variables being less important than school actions that encourage parental involvement (Adams & Christenson, 2010; Jeynes, 2010; Kingston, Huang, Calzada, Dawson-McClure, & Brotman, 2013). In a randomised controlled trial with parents of preschool children, Mendez (2010) found a correlation between positive parent/teacher relationships and higher levels of school readiness abilities in children, including vocabulary and social/emotional competence. It is therefore important that schools create an environment in which parents and teachers work together to ensure that children feel secure, confident, and understood, cultivating their learning experience and future resilience (Pizzolongo & Hunter, 2011).

Interviews with parents highlight the importance of school staff informing them of how they can be involved (Pena, 2000), and providing information on what their children are learning and how they can help to support their children's education (Tsurkan, 2016). Positive school invitations and a welcoming school climate demonstrate that teachers value the interest/involvement of parents (Tsurkan, 2016) and encourage parental involvement (Jeynes, 2010).

Schools can encourage parents to promote school readiness skills at home (Education Endowment Foundation, 2019; Emerson, Fear, Fox, & Sanders, 2012). Some of the recommended strategies include shared book reading and shared play time (Education Endowment Foundation, 2019). However, early years teachers report limited knowledge of parents' involvement in out of school educational

activities with their children, particularly among less well educated parents (George, 2012). With greater recognition of the importance of parental involvement there is a need to develop and evaluate interventions that enhance home-school links and promote children's school readiness skills (Welsh, Bierman, & Mathis, 2014).

The Incredible Years® (IY) Programmes

The IY series, developed over the last 30 years, are evidence-based programmes for parents, teachers, and children that increase positive parent and teacher competencies and promote children's social-emotional competencies (Webster-Stratton, 2011). The IY parenting suite has strong evidence for reducing negative and increasing positive parenting behaviours and for preventing, reducing, and treating behavioural and emotional problems in young children and these programmes have been incorporated into services across the UK (Hutchings, 2012; Little et al., 2012; McGilloway et al., 2012). They have been particularly well established within Wales where the Welsh Government funded their introduction, over a seven-year period as part of the Parenting Action Plan for Wales including support for school-based programmes (Hutchings, 2015; Hutchings & Williams, 2017). Whilst the specific programme curricula vary, all of the parent programme delivery strategies involve developing a collaborative relationship with parents, discussing the rationale for specific strategies, looking at video-clips to identify useful parenting behaviours, rehearsing skills in role-play, and setting home activities to be completed by parents.

The IY School Readiness Parent Programme

The School Readiness programme (IY-SR; Webster-Stratton, 2011) is a four session, universal intervention that has yet to be evaluated. The programme uses the same delivery components and collaborative delivery style as the other IY programmes. It encourages parents to build children's language skills, coaching them in descriptive commenting, open-ended questioning, reflecting/expanding on child speech and encouraging and praising them during both shared play activities and whilst exploring books together (Webster-Stratton, 2011). The four two-hour weekly sessions are intended for groups of up to 12 parents of children aged three-to-five years. The programme has two parts, both of which encourage children's academic, social-emotional, and problem-solving skills: (1) child-directed play – strengthening parent-child relationships (two sessions) – and (2) interactive reading – using books to aid discussion (two sessions). When offered to parents by school-based staff, immediately before or after their child starts school, the programme aims to encourage positive home-based parenting activities (including shared reading and play) and to develop home-school links (by strengthening the relationship between the parents and school staff). The content of the programme fits well with the current strategies recommended to schools to encourage parental involvement but in a structured programme.

Aims

Across the UK parents of children are entitled to free half time nursery education from the September of the year in which they will become 4 years old. The present study was designed to involve parents in their children's education at the start of their school life by building a home-school partnership through offering a group-based school readiness programme delivered by school staff, and introducing parents to activities that they could do at home to support their children's education. Other school readiness programmes available in the UK are curriculum-based, intensive for staff (18-22 weeks), and do not have elements of direct contact with parents. The IY-SR is a short, four-week programme that directly engages parents

in their children's development of school readiness skills, in the form of academic, socio-emotional, problem-solving, and language promotion.

This paper explores the feasibility of school staff in Welsh primary schools delivering the IY-SR programme to parents of nursery and reception class children and reports preliminary outcomes in relation to strengthening home-school links and encouraging key parenting skills associated with children's school readiness.

Method

Recruitment

School recruitment. Ten schools in North West Wales, UK were recruited over two recruitment phases by word of mouth, five schools at each phase. These schools have pupils aged from 3 to 11 years. Pupil numbers in the schools ranged from 95 to 305 (M = 172.86, SD = 68.87) and the nursery aged intake ranged from 11 to 49 children (M = 28.43, SD = 13.35). All ten schools delivered teaching mainly through the medium of Welsh. One school from each recruitment phase dropped out before commencing programme delivery, leaving eight schools.

Family recruitment. The sample recruited was a convenience sample. Families were recruited by staff in the ten primary schools in North West Wales, UK. Families were eligible for inclusion if they had a child aged 3-5 years in the participating school and the primary caregiver indicated that they were able to attend the four-session programme at the school. The primary carers of 32 children participated in the study (see Figure 1 for flow diagram).
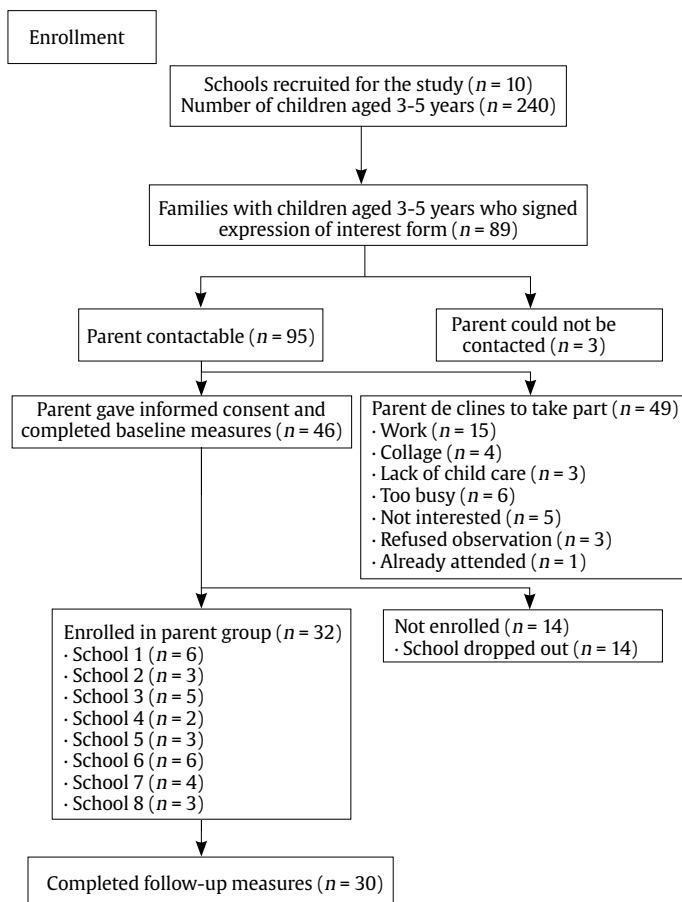

Figure 1. Participant Flow Diagram.

Design

The feasibility of programme delivery and the home-school relationship were evaluated by post-course interviews and questionnaires with parents and leaders. The preliminary impact of the programme on parent and child outcomes was assessed using a pre- and post-test repeated measures design.

Measures

Family demographics. A demographic questionnaire was designed to obtain basic socio-demographic and general health data of the family. It covered aspects of family structure and parental education. The questionnaire was based on the Personal Data and Health Questionnaire (Hutchings, 1996).

Feasibility outcomes. The feasibility outcomes were operationalised in terms of recruitment, retention, engagement, satisfaction (including self-report questionnaires and interviews/ focus groups, see below), and fidelity to the manual (using programme specific group leader completed session checklists).

Group leader satisfaction (Webster-Stratton, 2011). The group leader feedback questionnaire had four items on the home-school relationship, rated on a five-point scale from *strongly agree* to *strongly disagree*. An example item is: "The relationship between the parents and the school has improved since they have attended the programme". A further ten items covered specific aspects of the programme including supervision, overall feeling about the programme, likelihood of running the programme again, and delivery barriers. Items were rated on a five-point scale from *very helpful/ easy/effective/positive/likely* to *very unhelpful/difficult/ineffective/ negative/unlikely*. An example item is: "How would you rate the effectiveness of the programme?". Group leaders were also asked what they liked and disliked about the programme.

Parent satisfaction (Webster-Stratton, 2011). The IY-SR end of course satisfaction questionnaire for parents has six subscales: Overall programme based on three items and rated on a seven-point scale from *very negative* (1) to *very positive* (7); Programme recommendation based on one item and rated on a seven-point scale from *strongly not recommend* (1) to *strongly recommend* (7); Usefulness of the teaching format based on seven items and rated on a seven-point scale from *extremely useless* (1) to *extremely useful* (7); Usefulness of the parenting techniques based on five items and rated on a seven-point scale from *extremely useless* (1) to *extremely useful* (7); Group leaders based on four items and rated on a seven-point scale from *extremely unhelpful* (1) to *extremely helpful* (7); Parent group based on two items and rated on a five-point scale from *very non-supportive* (1) to *very supportive* (5). An additional subscale for home-school relationship was also used, based on seven items and rated on a five-point scale from *strongly agree* (1) to *strongly disagree* (7). These home-school relationship items included how comfortable parents felt about talking to teachers, how well they were heard by teachers and the school and whether their relationship with teachers had improved as a result of attending the course. There was also an open-ended question related to barriers to programme attendance.

Child behaviour – Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). The SDQ is a 25-item questionnaire with versions for different child ages and in different languages for completion by parents of 3-16 year old children. The English language 3-4 year old child age version was used in this study. Items are rated as *not true*, *somewhat true*, or *certainly true* on a 0-2 scale and a total difficulties score is derived by summing the scores from the 20 problem scale items. Higher scores indicate greater levels of difficulties, with a score of 0-15 classified as normal, 16-19 borderline, and 20-40 classified as abnormal. The SDQ has good internal consistency (mean α = .73), test-retest stability (r = .62), and discriminant validity (Goodman,

1997). The present study confirmed good internal consistency (total difficulties α = .76).

Parental Sense of Competence (PSOC; Johnston & Mash, 1989). The PSOC is a 17-item measure assessing parenting self-esteem and confidence. Items are rated on a six-point scale from 1 *strongly agree* to 6 *strongly disagree*. Scores can be summed to give a total score with higher scores indicating greater self-esteem. The questionnaire has previously demonstrated good internal consistency (total score α = .79; Johnston & Mash, 1989). The current study also demonstrated good internal consistency (α = .83).

Parent-child interaction – The Play and Reading Observation Tool (PAROT; Pye, 2015). The PAROT was used to measure parent-child interactions during a 30-minute home observation. The PAROT is a direct observational measure of parent-child interactions during 15 minutes each of shared play and joint reading undertaken within the home. It is based on the Dyadic Parent-child Interaction Coding System (DPICS; Robinson & Eyberg, 1981). Nine items from the DPICS were used with additional items designed specifically to capture the school readiness parenting behaviours taught in the course (4 items). It contains five parent verbal behaviour composite categories: academic coaching, socio-emotion coaching, problem-solving coaching, encouragement/praise, and reflection/ expansion, and three child verbal behaviour categories: child positive response, child negative response, and child spontaneous vocalisation. Each PAROT coding sheet is used to record the frequency of parent and child verbal behaviours across a 5-minute interval, by making a tally mark in the appropriate category box. Coding is continuous for a period of up to 15 minutes with parent and child categories coded simultaneously. The PAROT has demonstrated good code-recode reliability (ICC = .988), good inter-rater reliability (ICC = .916), and adequate concurrent validity as a measure for assessing parent-child interactions in both reading and play contexts (Pye, 2015).

Group leader focus groups. Questions asked during the focus group discussions with group leaders included the overall opinion of the IY-SR programme, perceptions of benefits to themselves and the school as well as to parents and children, effects on relationships between parents and the school, barriers to implementation, and recommendations for future implementation.

Parent interviews. The interview asked how useful parents found the programme, whether there had been changes in their own or their child's behaviour and/or their relationship with their child as a result of attending the course, and whether the programme had perceived benefits for the school and their relationship with the school.

Ethical Considerations

Following ethical approval by the affiliated university (approval number: 1628), eight primary schools were recruited to deliver the programme, four in phase 1 and four in phase 2. All primary caregivers and school staff members provided written informed consent to participate.

Procedures

School recruitment. Prior to consent to participation, all schools were informed of what was being offered in terms of training and support to deliver the programme and briefed on the recruitment procedure and timeline for parent recruitment and delivery of the programme. Schools were asked to choose two members of staff (teachers, teaching assistants, head teacher, etc.) to deliver the programme. Sixteen staff, two from each school, were recruited. All but two were school-based staff and included teachers (n = 8), head teachers (n = 4), and classroom assistants (n = 2). One group was run by a teacher and a psychologist and another by a teacher and a locally based community parenting worker, an experienced IY parent group

leader. Leaders attended a two-day accredited training course with a certified IY trainer (first author). Leaders also received two hours supervision following each session from the first author.

Parent/family recruitment. Participating schools provided information, including a flyer and study information sheet, to parents of nursery and reception class children, inviting them to attend the programme and participate in the evaluation. Schools were encouraged to target parents of newly enrolled children. Interested parents completed an expression of interest form that was passed to the researcher who arranged an initial visit to obtain written parental consent. Informed consent was obtained from all individual participants included in the study.

Data collection. The second author collected all measures during two home visits: one after parents had consented to participate in the study (baseline) and another six months later (follow-up). Parents attended the programme in the interim. Semi-structured interviews, questionnaires, and observational measures were collected during home visits. Questionnaires were completed through the medium of English, although semi-structured interviews and observations were conducted using the carer's preferred language.

For the PAROT observation, each parent-child dyad was observed for a maximum of 30 minutes. The parent was given a book in their preferred language (Welsh or English) and asked to look at the book with their child. After 15 minutes the parent was asked to play with their child for a further 15 minutes, using toys from their own home. The families were given the book as a thank-you gift for their participation. The second author (primary coder) live-coded all home visits (N = 64), and another trained researcher (fourth author) live-coded 39% of visits (n = 25) for reliability purposes. The primary and secondary coders demonstrated good inter-rater reliability (ICC range .875-.984).

Parent semi-structured interviews were conducted at the same time as the collection of the six-month follow-up data. All the interviews were conducted by the second author. The interviews were not audio-recorded; however, detailed notes were taken of the responses from each parent.

All 16 staff from the eight participating schools were invited to take part in one of two focus groups. The focus groups were conducted by the second author after the group leaders had attended the final weekly supervision session, which occurred after delivery of the final programme session. Fourteen leaders, representing seven of the eight schools, participated in a focus group. As previously, the focus groups were not audio-recorded; however, detailed notes were taken of the group leaders' responses.

The Intervention

The programme was delivered for four weeks in weekly two-hour sessions in the participating schools during school hours. The aim of the programme is to promote four dimensions of school readiness: academic, emotional regulation, social, and problem-solving skills. The programme has two parts: (1) child-directed play – strengthening parent-child relationships and children's social, emotional, and cognitive skills through play (two sessions) – and (2) interactive reading – using books to encourage social, emotional, academic, and problem-solving skills (two sessions). The programme encourages parents to build their children's language skills by coaching them using descriptive commenting, open-ended questioning, reflecting/ expanding on child speech, encouraging and praising during shared play and reading. Sessions are delivered using a range of methods including group discussion, reviewing video clips of parents and children showing different parenting skills to promote discussion, rehearsal of the skills using role-play techniques, and homework assignments to practice the skills learned at home.

Delivery was conducted by pairs of group leaders in each school. There were 16 group leaders in total. All but two of the group leaders

were school-based staff including teachers, classroom assistants, and a head teachers. One leader who was not school-based was a psychologist who was in training to become a mentor for the programme and one was a locally based community parenting worker, already an experienced IY parent group leader. All leaders undertook group leader training and were offered two hours of supervision each week from a certified IY trainer. Training for the programme was free as part of the trial but schools had to cover teacher supply costs.

Statistical Analyses

The feasibility outcomes are reported using summary statistics. Data analyses were performed using SPSS 24.0. There were some difficulties with the observation measure with some families struggling to engage their child for 15-minutes of reading and 15-minutes of play (baseline: 50% reading, 84% play; follow-up: 37% reading, 90% play). However, the majority of families were observed for at least five minutes in both tasks (baseline: 97%; follow-up: 91%), therefore the analyses were based on the summed frequencies calculated pro-rata for the first five minutes of the reading and play tasks and combined to give an overall score for each observed category.

All variables were checked for violations of normality using visual methods (histograms and Q-Q plots). Only one of the observed variables violated normality assumptions (PAROT socio-emotion) and was transformed using a squareroot transformation for the analyses. Pre- and post-test analyses were conducted using paired *t*-tests and mean difference confidence intervals were examined to asses the differences between baseline and follow-up outcomes. Cohen's *d* effect sizes are also reported.

Content analysis was used to assess parent feedback after attendance on the IY-SR programme and group leader feedback following delivery of the IY-SR programme. Units of analyses included barriers and facilitators to programme engagement and programme benefits.

Results

Sample Characteristics

The majority (71.9%) of parents were educated beyond the age of 16. They had mean age of 25 years at the birth of their first child and 75% reported their children's behavior on the SDQ as within the normal range. Just over half (*n* = 17, 53%) of the participating families spoke Welsh as their first language. None of the children were in receipt of any special needs provision (see Table 1).

Table 1. Family Characteristics at Baseline for Control and Intervention Conditions

Demographics	(*N* = 32)
Child age, months: *M* (*SD*)	45.25 (5.38)
Child gender, male: *n* (%)	13.00 (40.6)
Parent age, years: *M* (*SD*)	34.56 (6.74)
Parent gender, female: *n* (%)	31.00 (96.9)
Age birth first child: *M* (*SD*)	25.66 (7.12)
Single parent: *n* (%)	7.00 (21.9)
No post 16 education[1]: *n* (%)	9.00 (28.1)
Large family[2]: *n* (%)	17.00 (53.1)
SDQ Total Difficulties: *M* (*SD*)	10.25 (6.16)

Note. [1]Left school at or before 16 years; [2]Three or more children.

Recruitment and Retention

Recruitment of parents was disappointing with only a mean of four parents enrolled for the groups (range: 2 to 6). Study retention was very high. Of 32 families assessed at baseline, 30 (94%) completed post-intervention assessments.

Fidelity

Fidelity of programme content delivery was assessed based on group leader completed session checklists. An average of 69.3% of programme content was delivered (range 59.8-81.6%). When examining what aspects of the programme were delivered, an average of 52.4% of the video vignettes were delivered (range 36.2-76.6%) compared to the core content (average 89.1%; range 77.5-97.5%). Group leaders attended 100% of supervision sessions.

Programme Engagement and Acceptability

All 32 parents attended at least one session of the programme. Two parents (6.3%) only came to one session. Mean session attendance was 3.16 sessions (*SD* = 1.02).

Parents. Twenty-seven parents (84.4%) responded and gave an overall high rate of positive feedback. This included a strong recommendation of the programme to other parents, very positive ratings on the teaching format and techniques taught in the programme, and an improvement in the home-school relationship (see Table 2). Barriers to programme attendance included personal circumstances (such as being a lone parent and starting a new college

Table 3. Pre- and Post-test Results based on Paired *t*-test Analyses

	Baseline *M* (*SD*)	*N*	Follow-up *M* (*SD*)	*N*	Mean difference (95% CI)	Effect size (95% CI)
Child behaviour						
SDQ Total	10.25 (6.16)	32	8.83 (4.60)	30	-1.40 (-3.10, 0.30)	-0.22 (-0.50, 0.05)
Parental competence						
PSOC	75.19 (11.59)	32	76.10 (10.87)	30	1.43 (-1.55, 4.41)	0.12 (-0.13, 0.38)
Parent-child observation						
PAROT academic	22.10 (10.63)	31	24.75 (13.95)	28	3.00 (-2.30, 8.30)	0.28 (-0.22, 0.78)
PAROT socio-emotion	3.48 (3.40)	31	4.39 (3.76)	28	0.14 (-0.41, 0.68)	0.14 (-0.41, 0.69)
PAROT problem-solving	18.03 (8.20)	31	20.68 (11.11)	28	2.43 (-1.23, 6.09)	0.30 (-0.15, 0.74)
PAROT encourage/ praise	8.45 (5.42)	31	13.32 (8.28)	28	4.57 (1.84, 7.30)	0.84 (0.34, 1.35)*
PAROT reflect/ expand	18.00 (9.95)	31	16.18 (8.97)	28	-1.61 (-4.46, 1.24)	-0.16 (-0.45, 0.12)
PAROT child positive response	36.29 (13.68)	31	45.57 (16.24)	28	9.32 (3.72, 14.92)	0.68 (0.27, 1.09)*

Note. Baseline range scores: SDQ (1-23), PSOC (52-98), PAROT academic (4.67-61.83), PAROT socio-emotion (0-11.33), PAROT problem-solving (2.50-54.17), PAROT encourage/ praise (0.83-23.33), PAROT reflect/expand (3.00-44.58), PAROT child positive response (14.17-63.67).
Follow-up range scores: SDQ (0-24), PSOC (48-97), PAROT academic (6.33-43.00), PAROT socio-emotion (0-11.23), PAROT problem-solving (3.67-40.00), PAROT encourage/praise (0.33-29.67), PAROT reflect/expand (4.00-45.03), PAROT child positive response (13.92-84.83).
**p < .01.

course), lack of child care facilities, and the fact that the sessions were being run during school hours.

Table 2. Programme Satisfaction (parents and group leaders)

Parent satisfaction	Modal rating	Mean score (SD)
Overall programme[1]	Very positive	6.67 (0.47)
Recommend[1]	Strongly recommend	6.69 (0.54)
Teaching format[1]	Extremely useful	6.47 (0.64)
Parenting techniques[1]	Extremely useful	6.19 (0.97)
Group leader[1]	Extremely helpful	6.80 (0.40)
Parent group[2]	Very supportive	4.88 (0.33)
Home-school relationship[2]	Agree	4.11 (0.61)
Group leader satisfaction	Modal rating	Mean score (SD)
Home-school relationship[2]	Strongly agree	4.57 (0.51)
Supervision[2]	Very helpful	4.57 (0.53)
Programme delivery[2]	Helpful	4.43 (0.50)
Overall programme[2]	Very positive	5.00 (0.00)
Likelihood to deliver again[2]	Very likely	4.57 (0.79)

Note. [1]Range 1-7; [2]Range 1-5.

Group leaders. Seven pairs of group leaders (87.5%) completed the feedback questionnaire with overall rating being very positive. These included strong ratings for benefits to the home-school relationship, the usefulness of supervision sessions, and a strong likelihood to deliver the programme again (see Table 2). Some of the identified barriers to programme delivery included funding (for staff time, child care), engaging parental interest in the programme, having available space for child care, time, and a lack of administratve support. Group leaders reported that they liked that the programme strengthened relationships with parents and built parental confidence as well as liking the shortness of the programme and the sessions on reading. Aspects of the programme that group leaders disliked included difficulties with following some of the videos and too much content to be delivered in each two-hour session.

Pre- and Post-test Results

Paired *t*-tests were conducted on all measures to examine the differences between pre- and post-course outcomes. Table 3 shows the results from the pre-post analyses. All significant results were based on the PAROT observation tool. There was a significant increase in parental encouragement/praise ($p = .002$) as well as child positive responses ($p = .002$) with medium to large effect sizes ($d = 0.84$ and $d = 0.68$ respectively).

Qualitative Feedback

Parents. Twenty-seven (84.4%) parents completed a semi-structured interview after attending the programme. Parents described the programme as supportive, reinforcing things that they already knew, appreciated the support, and would recommend to others. They felt that the programme had changed their behaviour, that they were spending more time with their children and had learned new skills, including being more patient, labelling emotions, using more praise, asking fewer questions, and describing and commenting on their children's behaviour. Changes in their children's behaviour were also reported with children being more well behaved, having learned to wait, paying more attention, having less tantrums, and being more willing to listen. This led to better relationships with their children and feeling closer. Parents said that there was also a positive impact on their relationship with the school since the programme, allowed them to get to know their child's teacher/school. They reported that they felt more comfortable approaching the school and more able to talk to teachers, and had a better understanding

of what their child would be doing in school. They also felt that the programme benefitted schools by enabling teachers to get to know the parents, the family background, and the child.

Group leaders. Group leaders ($n = 14$) from seven schools participated in a focus group after delivery of the IY-SR programme. Group leaders had positive overall opinions of the programme; they said the programme was very good, that they had enjoyed delivering it, and that it was effective. The short length of the programme was seen as a positive since it was not too much of a commitment for schools or parents. Group leaders reported positive benefits to the relationship between parents and the school including raising awareness amongst parents of the school's ideas of school readiness. Perceived benefits to parents and children included strengthening parent-child relationships and increasing parent self-confidence. Cost was the biggest barrier or difficulty in implementing the programme since schools had to find supply cover in order for teachers to be released from the classroom to deliver the programme to parents. In terms of delivery of the programme, group leaders reported some difficulties with getting parents to complete the homework tasks and some parents did not understand the videos. There were also some challenges with finding a suitable date and time to deliver the programme and recruiting parents at the start of the school term. Recommendations for future implementation included the addition of an introductory session to engage parents and the inclusion of more content on praise.

Discussion

This is the first feasibility study of the IY-SR programme. The purpose of the study was to examine whether it was possible to deliver the IY-SR programme in schools using school-based staff, whether the programme was acceptable to parents and group leaders, and whether there were any indications of preliminary impact in terms of parents' use of school readiness skills at home. Thirty-two parents with a child in a nursery or reception class were recruited from eight schools. Feasibility outcomes (recruitment, fidelity, satisfaction, and retention) indicated that the programme was well received by parents and group leaders, was delivered with adequate fidelity, that there was good attendance by parents and good study retention (94%). Preliminary analyses of impact showed significant increases in parental praise and child positive responses, although due to the small sample these results should be interpreted with caution.

There were no challenges with recruiting schools for the project; however the recruitment of parents by school staff was much harder, resulting in small groups. The mean number of parents per group was four, the programme specifies a maximum of 12 parents. Engaging parental interest in enrolling for the programme was identified as a barrier to programme implementation. Parents identified session delivery time as a barrier to attendance with some finding it challenging to attend during school hours. This may have been due to work commitments or a lack of child care for very young children. Group leaders suggested that having an introductory session for parents might be useful in increasing initial parent interest in the programme. Future research would need to address the challenges with engaging parents including whether an introductory session would be an effective means of increasing enrolment and whether changing the time of session delivery would make a difference.

Overall attendance on the programme was high, with parents attending an average of at least three out of the four sessions. All parents attended at least one session of the programme, suggesting that the programme is acceptable to parents. Ratings of satisfaction by both parents and group leaders were very positive for all aspects of the programme. All parents who completed the end of course satisfaction questionnaire would recommend or strongly recommend the programme to other parents. Group leaders reported that they were very likely to deliver the programme again. This further suggests

that the programme was acceptable to both parents and school-based group leaders.

Group leaders reported delivering, on average, 69% of the programme content. One of the things that group leaders disliked about the programme was the fact that there was too much content that needed to be delivered in each session. This may be why the percentage of content delivered was only 69%. Nevertheless, schools delivered part of all of the session content components, home practice review, discussion, viewing video clips, role play, and homework discussion but they dropped some of the video vignettes. All the leaders attended the supervision sessions and rated them as being very helpful. Implementation fidelity is an important part of pragmatic research (Flay et al., 2005) and has been shown to affect programme outcomes (Furlong et al., 2012). Future research should explore this issue further with the IY-SR programme.

Preliminary analyses of impact showed no significant differences for the school readiness categories of the PAROT observation tool (academic, socio-emotion, problem-solving, reflect/expand), although there were increases in academic and problem-solving skills with small effect sizes. It is possible that four sessions are not enough to impact these skills but more likely that the sample size was not large enough to detect significant effects. This was a feasibility study and was not designed to evaluate the programme's effectiveness. A larger trial would need to be conducted to explore the effectiveness of the programme in improving school readiness skills. The lack of significant changes in school readiness skills could also be because the parents in the study were not at risk. It may be that parents were already promoting these skills at home with their children and therefore there was not much room for improvement.

The sample recruited were primarily from relatively advantaged backgrounds. On the whole there were small numbers of single parents, teenage parents (age of birth of first child was in the mid 20s), and parents with low levels of education. There were also very low levels of reported child behaviour problems. Many of the factors associated with poor school outcomes are related to disadvantaged backgrounds (O'Connor et al., 2018), suggesting that the parents recruited were not necessarily the parents of children lacking school readiness skills. The programme was offered as a universal intervention to all families with a child aged 3-5 years, meaning that schools were not asked to specifically target particular families. Recruitment problems for universal interventions are not uncommon (e.g., Cullen, Cullen, & Lindsay, 2016). Engaging disadvantaged families in interventions can be extremely challenging and requires a strong working relationship and high degree of practitioner skill (Asmussen, Waddell, Molloy, & Chowdry, 2017). This may be why there was a lack of disadvantaged families in the sample. This is a limitation of the study and in the generalisability of the results. Furthermore, only one father was recruited to the study. The engagement of fathers in parenting programmes is an under-researched area (Panter-Brick et al., 2014), despite evidence showing that fathers have a substantial impact on their children's development (Feldman, Bamberger, & Kanat-Maymon, 2013; McWayne, Downer, Campos, & Harris, 2013; Ramchandani et al., 2013). Future research would need to explore how best to engage disadvantaged families and fathers in school-based interventions like IY-SR. A recent report by the Education Endowment Foundation (2019) recommend a number of strategies to improve parental engagement with schools, including weekly text messages.

Future Directions

This trial followed the pattern in Wales in introducing other IY programmes which was initially to test feasibility prior to encouraging broader roll out and experience suggests that once some parents in a

school report positive feedback on courses offered this acts as a useful recruitment strategy for engaging other parents. This programme has also worked in this way and since this trial two counties in Wales have taken delivery of this programme on strategically. Flintshire has 64 primary schools and is in its 4th year of embedding the programme in its nurseries and primary schools. It has 82 trained facilitators in 41 primary schools (64% of schools). Head teachers sign a Service Level Agreement to support the facilitators and deliver the programme in return for the training, resources and support to ensure confident, effective, delivery. An example of positive feedback in an Estyn School Inspection received by one school was "Excellent for Partnership Working." "The school's family liaison officer…. has established a wide range of very successful and well-attended family learning projects, including… 'School Readiness' that are having a highly effective impact on improving pupils' attitudes to school, progress in learning and wellbeing."

Powys has 80 primary schools and over a period of five years has trained 81 staff, 64 school-based staff from 34 schools (43%), as well as 14 staff from seven early years settings. Of the 34 primary schools trained, 22 (28% of all Powys primary schools) have, so far, delivered the programme and 12 schools deliver it regularly. Some schools deliver it in partnership with early years setting leaders.

The results of this trial suggest that further research on the IY-SR programme is justified. The sample in the current study lacked diversity suggesting that the results are not generalisable to the target population. However, one of the features of the IY parenting programmes is their collaborative nature which contributes to its effectiveness with diverse populations and there is strong evidence that they are equally effective with socially disadvantaged families (Gardner, Hutchings, Bywater, & Whitaker, 2010; Gardner et al., 2019). More research is needed to determine whether this IY programme is suitable for a more diverse sample (disadvantaged families, fathers). A larger study using rigorous methods, involving a randomised controlled trial design, would be appropriate to explore programme effectiveness, once the issues around engagement of disadvantaged families and fathers has been explored.

Conclusions

The programme was well received by parents and group leaders. Its short duration was seen as useful and it enabled school-based staff to build relationships with, and talk to, parents in a relaxed and trusting environment. Parents reported changes in their parenting and in their children's behaviour; this was also confirmed by the observational data. Given the positive feedback from both school staff and parents, the results, including recruitment challenges identified, could inform a larger and more rigorous trial. The results are encouraging, suggesting the feasibility and benefits of delivering a short, universal parenting intervention as children start school. However, caution is needed when interpreting the results considering that this was a pre-post trial with no comparison group, small sample, and lack of generalizability to the target population (parents of children aged 3-5 years).

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