A mixed-methods evaluation of the longer-term implementation and utility of a teacher classroom management training programme in Irish primary schools

Article *in* Irish Educational Studies · January 2016

DOI: 10.1080/03323315.2016.1147974

CITATIONS
6

READS
506

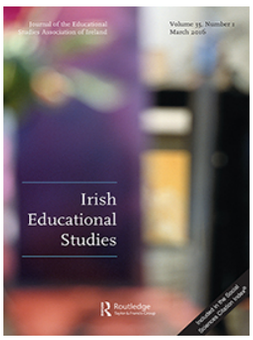
9 authors, including:

Yvonne Leckey
National University of Ireland, Maynooth
24 PUBLICATIONS **274** CITATIONS
SEE PROFILE

Lynda Hyland
Middlesex University Dubai
13 PUBLICATIONS **55** CITATIONS
SEE PROFILE

Grainne Hickey
Barnardos Ireland
33 PUBLICATIONS **292** CITATIONS
SEE PROFILE

Anne Elizabeth Lodge
Dublin City University
15 PUBLICATIONS **261** CITATIONS
SEE PROFILE



Irish Educational Studies

ISSN: 0332-3315 (Print) 1747-4965 (Online) Journal homepage: http://www.tandfonline.com/loi/ries20

A mixed-methods evaluation of the longer-term implementation and utility of a teacher classroom management training programme in Irish primary schools

Yvonne Leckey, Lynda Hyland, Gráinne Hickey, Anne Lodge, Paul Kelly, Tracey Bywater, Catherine Comiskey, Michael Donnelly & Sinéad McGilloway

To cite this article: Yvonne Leckey, Lynda Hyland, Gráinne Hickey, Anne Lodge, Paul Kelly, Tracey Bywater, Catherine Comiskey, Michael Donnelly & Sinéad McGilloway (2016) A mixed-methods evaluation of the longer-term implementation and utility of a teacher classroom management training programme in Irish primary schools, Irish Educational Studies, 35:1, 35-55, DOI: 10.1080/03323315.2016.1147974

To link to this article: http://dx.doi.org/10.1080/03323315.2016.1147974

Irish Educational Studies, 2016
Vol. 35, No. 1, 35–55, http://dx.doi.org/10.1080/03323315.2016.1147974

Routledge
Taylor & Francis Group

A mixed-methods evaluation of the longer-term implementation and utility of a teacher classroom management training programme in Irish primary schools

Yvonne Leckey[a]*, Lynda Hyland[b], Gráinne Hickey[a], Anne Lodge[c], Paul Kelly[a], Tracey Bywater[d], Catherine Comiskey[e], Michael Donnelly[f] and Sinéad McGilloway[a]

[a]*Mental Health and Social Research Unit, Maynooth University Department of Psychology, National University of Ireland Maynooth, Maynooth, Co Kildare, Ireland;* [b]*Department of Psychology, Middlesex University, Dubai, United Arab Emirates;* [c]*Church of Ireland College of Education, Dublin, Ireland;* [d]*Department of Health Sciences, University of York, York, UK;* [e]*School of Nursing and Midwifery, Trinity College Dublin, Dublin, Ireland;* [f]*UKCRC Centre of Excellence for Public Health, School of Medicine, Dentistry and Biomedical Sciences, Queen's University Belfast, Belfast, Northern Ireland*

(*Received 15 August 2015; accepted 21 January 2016*)

Inappropriate, aggressive and disruptive behaviour in the classroom can be detrimental to child and teacher well-being. This study involved a longer-term evaluation of the *Incredible Years Teacher [Classroom Management]* programme (IYTP) undertaken mainly within disadvantaged schools in south-west Ireland. The IYTP is designed to strengthen teacher classroom management competencies. Eleven teachers, who had previously participated in a group-randomised control trial (RCT), took part in a 12-month post-baseline follow-up assessment. Psychometric and observational measures were administered to assess teachers when interacting with children ($n = 217$) in their classes. Qualitative data were collected from a sub-sample of teachers to explore their perceptions of programme impact and utility. The quantitative results showed some significant improvements in teachers' classroom management, although few changes were recorded on teacher-child observation measures. Qualitative findings indicated continued implementation of proactive disciplining strategies and higher levels of teacher self-efficacy. These results suggest, albeit tentatively in view of the study limitations, that the IYTP can benefit teacher classroom management, as well as teacher well-being, particularly within disadvantaged schools where behavioural problems tend to be more prevalent. The IYTP could prove useful in improving teacher competencies and the classroom environment in the longer term, although a need for further research is indicated.

Keywords: teacher classroom management; teacher behaviour; conduct problems; teacher and student well-being

Introduction

Social, emotional and behavioural difficulties (SEBD) in children are a significant source of concern for parents and teachers alike (INTO 2004). According to the Growing Up in Ireland[1] Study, negative behaviour such as bullying is also increasing in schools, with, 40% of 9 year olds having reported being victims of bullying in the past year (Williams

*Corresponding author. Email: yvonne.leckey@nuim.ie

et al. 2009). Despite this, disciplinary problems in Irish primary schools are typically minor, with most pupils considered to be well-behaved (INTO 2005; Williams et al. 2009).

Socio-economic disadvantage has been found to be strongly associated with both behavioural problems and poor educational outcomes in early childhood (Janus and Duku 2007; Qi and Kaiser 2003; Reiss 2013). Early findings from the evaluation of programmes in the Irish Prevention and Early Intervention Initiative,[2] indicated a higher rate of emotional and behavioural difficulties amongst children living in disadvantaged areas when compared to more affluent areas (Statham 2013). Kiernan and colleagues found that more than one-third of socio-economically disadvantaged pupils in Junior Infants (the first year of formal education) in Ireland had significant socio-emotional difficulties (Kiernan et al. 2008). Furthermore, SEBDs are reported to more prevalent (>40%) in DEIS-band schools[3] which are located in disadvantaged areas in Ireland (Banks and McCoy 2011). Whilst DEIS schools provide additional resources for disadvantaged children, they tend to have more challenging disciplinary climates (Smyth, McCoy, and Kingston 2015) which create a barrier to effective classroom management and positive pupil–teacher relationships.

Classroom management refers to the actions undertaken by teachers to establish and communicate learning goals, reinforce acceptable pupil behaviour and provide negative consequences for unacceptable behaviour (Marzano and Marzano 2003). Classroom management techniques which aim to improve SEBDs, can positively influence educational attainment as well as child mental health, whilst also supporting teachers to create a more positive learning milieu. A positive classroom environment is also associated with healthy teacher–pupil relationships and improved pupil socio-emotional competence and behaviour management (Jennings and Greenberg 2009). Teachers with under-developed classroom management skills tend to have higher levels of aggression and peer rejection in their classrooms (Webster-Stratton, Reid, and Stoolmiller 2008). Disruptive and aggressive behaviour also places significant demands on teachers and has been shown to lead to stress, burnout and lower job satisfaction (Clunies-Ross, Little, and Kienhuis 2008; Friedman 2006; Greene et al. 2002).

Teacher education programmes in Ireland commonly include support for teachers in the area of classroom management and discipline (NQT[4] programme); typically, these include practical experience aimed at creating effective learning environments and fostering teacher–pupil relations (Department of Education & Science 2006). Whole-school approaches to positive behaviour further underline the importance of reinforcing good classroom behaviour (INTO 2005). Teachers and pupils can also avail of the range of supports provided by the Special Education Support Service (SESS), the National Educational Psychological Service (NEPS) and the National Behavioural Support Service (NBSS). However, evidence suggests that for some teachers, initial teacher education (ITE) does not sufficiently prepare them to manage the types of difficulties encountered in the classroom (Duck 2007; Stoughton 2007) and especially in view of their often context-specific nature. Research has also indicated a gap between the (increasing) availability of evidence-based interventions and their practical application in schools (Stormont, Reinke, and Herman 2011).

The Incredible Years Teacher [Classroom Management] programme (IYTP)

The Incredible Years Teacher Classroom Management Programme (or Teacher Programme for short) (IYTP), which is the focus of this study, is a group-based intervention

guided by behavioural and social learning principles (Webster-Stratton 2006). The Incredible Years Series is a (commercially available) suite of three inter-linked programmes (Parent, Teacher and Child) designed to support positive emotional and social development in children (aged 0–12 years) and to address behaviour management through parent, teacher and child training (Webster-Stratton 2011). The IYTP has been implemented in several countries worldwide (e.g. Wales, Portugal, Norway and New Zealand), and a growing body of research focuses on programme outcomes in cultural contexts outside the US (e.g. Baker-Henningham et al. 2009). The programme prioritises implementation fidelity (Webster-Stratton and Herman 2010), and adherence to both session content and programme materials, such as DVDs, books, and delivery manuals. Thus, it is crucial that the programme is delivered as intended and it cannot, therefore, be adapted to different contexts.

The IYTP focuses on building teachers' competencies and reinforcing positive behaviour through the effective use of praise, encouragement and incentives in order to reduce disruptive behaviour. Goal setting and self-reflective learning are also key programme components. The Irish curriculum supports the enhancement of pupil well-being in the classroom (INTO 2012); similarly, the IYTP promotes relationship building by encouraging problem solving, emotional regulation, and social skills development. The IYTP programme was selected in preference to other programmes as existing research has indicated significant post-training improvements in teacher behaviour (Hutchings et al. 2007), whilst training and supervision in the IYTP is now provided in many parts of Ireland, including the south-west where this study was conducted. Several other well-known programmes exist for tackling classroom behaviour including the Good Behavior Game (GBG; Barrish, Saunders, and Wolf 1969), Promoting Alternative Thinking Strategies (PATHS; Kusché and Greenberg 1994) and Friends for Life (Barrett 2004). However, these have a more narrow focus than the IYTP, which is designed to promote a whole-school ethos around classroom management, thereby supporting effective teaching and positive pupil experiences.

Research has demonstrated the short-term effectiveness of the IYTP, with increased teacher use of positive and preventative strategies and decreased use of negative/coercive strategies (Baker-Henningham, Scott, and Walker 2012; Carlson et al. 2011; Fergusson, Horwood, and Stanley 2013; Hutchings et al. 2013; Hickey et al. 2015). Positive outcomes for children include increased prosocial behaviour, student co-operation and lower levels of aggressive behaviour (Webster-Stratton and Reid 2004) as well as less teacher stress (Baker-Henningham and Walker 2009). The IYTP has been evaluated largely in combination with parent- and/or child-training programmes (Webster-Stratton, Reid, and Hammond 2004; Webster-Stratton, Reid, and Stoolmiller 2008). However, very little is known about its effectiveness as a stand-alone programme, its longer-term implementation, or its utility for teachers.

The IYTP is delivered one day per month for five to six months by two trained facilitators. The training sessions consist of group-led discussions and practice in problem solving and implementing new techniques. DVD clips are used to illustrate key points in each session and provide opportunities to discuss concepts and their application. During the month-long interval between each teacher training session, teachers implement the new classroom management strategies (e.g. methods to increase prosocial behaviour) and carry out classroom assignments (e.g. proactive strategies such as social/emotional coaching) They also keep a written diary on their progress and challenges. In addition, they receive regular verbal feedback on

assignments and a monthly telephone call from facilitators in between training sessions. In the current study, one group facilitator, a former teacher, was fully accredited in delivering the IYTP; the other, a psychologist, was working towards accreditation. The accreditation process involves rigorous assessments and regular reviews of delivery performance (Webster-Stratton et al. 2011). Group facilitators received regular supervision throughout the programme. This (and the original IY Group Leader Training) was provided by a national organisation called Archways.[5]

The current study

The current study was undertaken as part of a group-randomised controlled trial (RCT) which explored the impact of the IYTP on teacher and child behaviour. Our short-term findings highlighted beneficial outcomes for intervention group teachers and children, including decreased use of negative classroom management strategies and improvements in child behaviour and psychosocial adjustment in the classroom (Hickey et al. 2015). The aim of the current study was to examine the longer-term implementation and utility of the IYTP for Irish primary school teachers mainly within disadvantaged areas.

At longer-term follow-up, the original cohort of children in the RCT had moved up a grade and were no longer taught by the intervention group teachers. Therefore, we were unable to assess the longer-term effectiveness of the programme on the original child cohort at 12 months. Consequently, the objectives of this study were to: (1) explore teachers' continued use of IYTP classroom management techniques; (2) assess teacher attitudes towards classroom management; and (3) ascertain the perceived value and effectiveness of the IYTP training.

Method

Study context

This study involved a longer-term follow-up of teachers who had previously been randomly allocated to an IYTP intervention group (Figure 1). The RCT involved 11 schools, 22 teachers and 445 children aged 4–7 years (i.e. from Junior and Senior infant classes). Children aged 4–7 years were included in the study as this is the age range targeted by the IYTP (Webster-Stratton 2005). Participating schools were located in the south-west of Ireland. Initial inclusion criteria (as requested by the funders) required that all schools be located in, or had a large number of pupils from, disadvantaged areas. However, many of the teachers in the DEIS schools had already been exposed to classroom management training due to local regeneration efforts. This restricted the recruitment of suitable schools and, therefore, other non-DEIS schools in the locality had to be included. Thus, 7 of the 11 schools were DEIS schools. Eight schools were based in urban locations (i.e. in and around Limerick city), two were semi-urban (i.e. outlying suburbs of Limerick) and one was in a rural area (County Clare). Eight schools were mixed-sex and one was non-denominational (i.e. not restricted to, or associated with, any religious denomination).

This paper reports on a 12-month post-baseline follow-up of the 11 intervention group teachers, plus interviews with a teacher sub-sample ($n = 6$). Due to ethical considerations, the 11 control group teachers were offered the programme after the 6-month follow-up and could not, therefore, be included in this study.

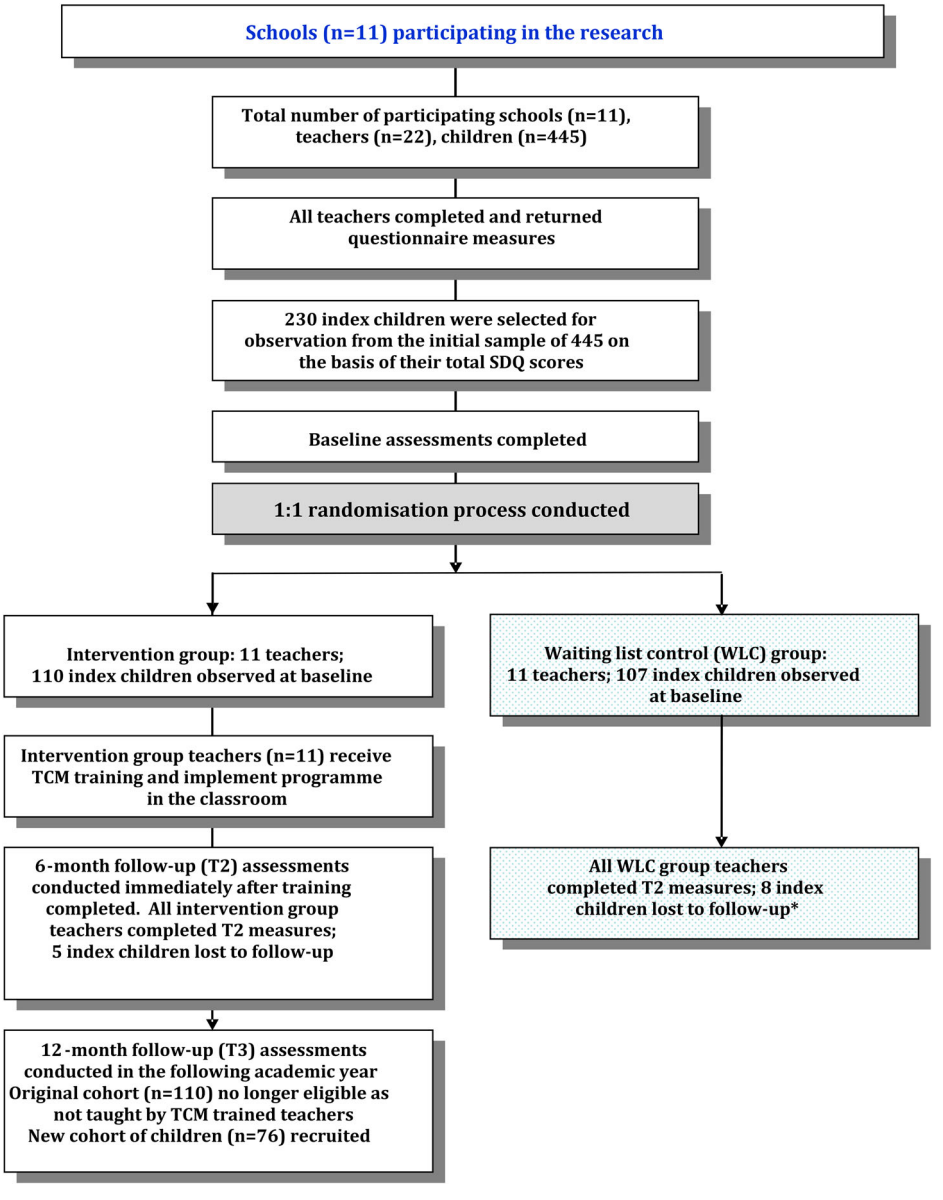


Figure 1. Flow of participants through the trial.
*WLC group offered the intervention after 6-month follow-up assessments; WLC group not included in 12-month follow-up assessments.

Study design

At baseline, teachers were asked to complete the teacher version of the *Strengths and Difficulties Questionnaire* (SDQ) for every child (aged 4–7 years) in their classroom ($n = 445$). Teacher participants were then randomly and blindly allocated on a 1:1 ratio to an intervention or wait-list control (WLC) group using a random number generator. Thus, 1 teacher from each school was allocated to the IYTP or to a WLC group. From

the 445 children initially screened, approximately 12 children from each class were selected for inclusion on the basis of their teacher-reported SDQ scores, to yield a cross-section of index children that was balanced in terms of 'high', 'medium' and 'low' levels of behavioural problems. Children absent from baseline, or whose parents failed to return consent forms, were excluded, resulting in a total of 217 child participants (Figure 1). Approximately one quarter (26%) of children in this sample were reported to have conduct problems and impaired socio-emotional difficulties, with abnormal levels of hyperactivity found in 18% of the sample (Hyland et al. 2014).

Participants

At the time of recruitment, 11 teachers were assigned to Junior Infants' classes and 11 to Senior Infants' classes. All teachers who participated in the RCT were teaching either a Junior or Senior infant class which included children in the first and second year of primary education respectively (average class size = 20 pupils)). All teachers were female, which reflects the typical teacher gender representation within Irish primary schools (Drew 2006). Most teachers were aged 25–34 years ($n = 8$), 1 teacher was under 25, and 2 were aged 35–54 years. Teachers had, on average, 9 years' teaching experience. Following the baseline assessments, participants were blindly and randomly allocated (on a 1:1 basis) to an IYTP intervention group ($n = 11$) or a WLC group ($n = 11$), so that one teacher from each school was in the intervention and one in the control group. At 12-month post-baseline follow-up (i.e. conducted in the next academic year), the 11 intervention group teachers were teaching a new class. One teacher had been moved to 4th class (average age of 9 years) at the 12-month follow-up, whilst all other intervention group teachers were teaching a Junior or Senior Infant class.

For the qualitative study, purposive sampling was used to obtain a small, but representative sample of teachers differing in age, service years, school types, and school locations. Six intervention group teachers were interviewed at the 12-month follow-up, 4 of whom worked in DEIS schools (Table 1).

Data collection methods

A mixed-methods approach was used including: (1) quantitative data involving observations of teacher behaviour and child conduct as well as questionnaires which assessed teachers' self-reported use of, and satisfaction with, a range of teacher classroom management strategies; and (2) qualitative data consisting of in-depth, one-to-

Table 1. Teachers who were interviewed at 12 months.

				Time of interview	
Teacher ID	Gender	School DEIS Band	Baseline	6-month follow-up	12-month follow-up
T1	Female	Non-DEIS			✓
T3	Female	DEIS Band 2	✓	✓	✓
T7	Female	DEIS Band 1	✓	✓	✓
T11	Female	Non-DEIS	✓		✓
T15	Female	DEIS Band 1			✓
T17	Female	DEIS Band 1			✓

one interviews (baseline, 6- and 12-month follow-up schedules) which explored teachers' experiences in the classroom and their perceptions of the long-term implementation and utility of the learned strategies in the classroom.

Research instruments

Observational outcome measure – teacher and child behaviour

Naturalistic observations of the classroom and teacher–pupil interactions were undertaken by two trained observers using the Teacher–Pupil Observational Tool (T-POT; Martin et al. 2010). This measure is based upon contemporary teaching and child behaviour research and was developed specifically for classroom observation. It incorporates elements of the Dyadic Parent Child Interaction Coding System (DPICS; Robinson and Eyberg 1982) and the Multiple Option Observation System for Experimental Studies (MOOSES; Tapp, Wehby, and Ellis 1995). The T-POT has been shown to have promising reliability (inter-rater reliability = 0.78) and validity (Martin et al. 2010). It allows for the simultaneous coding of: (1) child behaviour, both at the level of the target index child and at a classroom level; and (2) teacher behaviour (i.e. teacher interaction with all pupils in the classroom and direct interactions with index children). Its ease of administration also made it well-suited for use within the current study.

The T-POT provides frequency counts of classroom behaviours and teacher–pupil interactions, whereby each incident of a given behaviour (e.g. teacher command) constitutes one count. It comprises six categories of teacher behaviour which include: (1) 'teacher positives' (e.g. encouraging a child); (2) 'teacher negatives' (e.g. criticism directed towards a child/class group); (3) 'praise' (e.g. complimenting a child on achievement or effort); (4) 'indirect commands' (i.e. commands not expressly directed by the teacher, such as 'can you take your book out'?); (5) 'direct commands' (i.e. clear and well-defined instructions, such as 'take your book out'); and (6) 'no opportunity given for compliance' (failing to allow a child sufficient time to respond to a question/command). 'Live' practice observations plus regular video practice sessions were undertaken by researchers to ensure high inter-rater reliability. All practice checks exceeded the recommended minimum of 70% inter-coder reliability, with an average of 73% across all coders. Classroom observation sessions were conducted in each class pre- and post-training, and again for the intervention group teachers, at 12-month follow-up. Observations took place during formal, structured classes (e.g. maths or English lessons) and each index child was observed for 15 min. Classroom observations typically lasted 60 min and were divided into four 15 min blocks, during which time teachers were instructed not to interact with the observers and to continue with their normal activities. Researchers were originally blind to allocation; however, at the 12-month follow-up, only teachers who had received the intervention were assessed. Therefore, researchers could not be blind to intervention allocation at this juncture. Summary variables of observational data, which consisted of summed frequency counts of behaviours, were created for analysis.

Teacher self-report measures – use of classroom management strategies and teacher satisfaction

The *Teacher Strategies Questionnaire* (TSQ: Webster-Stratton 2005) is a 44-item measure used to elicit teachers' (self-reported) management of challenging classroom

behaviour. It has been successfully employed in research undertaken elsewhere (Hutchings et al. 2007) and is used to assess the frequency and usefulness of: praise and incentives; proactive strategies; limit-setting strategies; and inappropriate strategies. A score is calculated for the total use of positive strategies and the perceived utility of these strategies. Typical items include: 'How often do you describe or comment on bad behaviour?' or 'How useful do you find the use of physical restraint?' Respondents rate the extent to which statements reflect their behaviour (1 = rarely/never; 5 = very often). This questionnaire was also used to assess the teacher-perceived utility of classroom management strategies and any maintenance effects.

Interview schedules – teachers' experiences and perceptions of the programme

The interview schedules were informed by a review of the literature and by the research objectives. Baseline interviews related to current management practices, challenges within the classroom and expectations about the training. The follow-up interviews explored the teachers' continued use of the IYTP techniques in the classroom, whether these were as useful with the new cohort as they had been with their original class, and whether positive changes to the classroom environment had been sustained.

Intervention attendance and integrity

The intervention group teachers attended training sessions from 9am to 4pm one day per month, over a five-month period. The mean attendance was 4.8 sessions (96%) with 9 teachers attending all 5 training sessions. Two teachers missed one session each. A checklist was completed by both group facilitators after each session to assess treatment fidelity. The results showed that 88% of all prescribed course material was covered across the five sessions and there was a high level of agreement between the facilitators. However, facilitator adherence to the intervention protocol, or delivery quality, was not independently assessed.

Analysis – quantitative data

A one-way repeated measures ANOVA was used to examine differences in teacher behaviour between baseline, 6-month follow-up, and 12-month follow-up time points based on the observational data. Pairwise comparisons (paired *t*-tests) were used to compare time points (i.e. baseline-6-month, baseline-12-month and 6–12 month follow-ups) to ascertain whether treatment outcomes were sustained over time. We hypothesised that there would be no significant differences between the 6- and 12-month follow-up if the effects of the intervention had been maintained. No teachers were lost to follow-up so all teachers were included in the analysis. Effect sizes were calculated to provide an estimate of the size of the effect of the intervention on teacher outcomes; a small effect size is denoted by approximately 0.3, whilst 0.5 and 0.7 indicate moderate and large effect sizes respectively (Cohen 1988).

Analysis – qualitative data

All interviews were audio-recorded (following written informed consent), transcribed and subjected to a thematic analysis using the 'Framework method' (Pope, Ziebland, and Mays 2000). This involved a detailed reading and categorisation of the data into

key themes which were then subsumed into larger categories and arranged into a hierarchy to identify meaningful patterns and associations within the data to provide insights into how teachers fared at implementing the intervention in the longer term.

Results

Quantitative findings

The teachers used significantly more positive classroom management strategies at 12-months post-intervention when compared to baseline. There was no difference between the 6- and 12-month follow-ups, indicating that improvements in teachers' use of positive strategies were maintained in the longer run. Significant differences were also observed in teachers' use of negative classroom management strategies between the baseline and 12-month follow-up, whilst the use of indirect commands also declined. These results suggest that the intervention group teachers used more encouragement and other positive disciplining strategies with their pupils, and fewer harsh/critical statements and negative commands at the 12-month follow-up (Table 2).

The results from teachers' reports on the perceived usefulness of positive classroom management strategies support the observational data. Self-reported use and perceived usefulness of negative strategies continued to decline over time with significant differences found between the baseline and 12 month follow-ups. Self-reports also indicated increased use of positive strategies over time (Table 3).

Qualitative findings

The qualitative findings suggest that teachers found the IYTP to be highly effective for fostering good practice in the classroom at 12-month follow-up. From the teachers' perspective, IYTP training had led to continuous and, in some cases, additional classroom management improvements over the course of the year. These included: (i) a positive classroom environment; (ii) positive teacher–pupil relationships and child adjustment; and (iii) improved teacher confidence and well-being (Table 4).

A positive classroom environment

At the 12-month follow-up, teachers commented on the positive changes in child behaviour and in the general classroom atmosphere since undertaking the training. They alluded, in particular, to calmer, more co-operative children and harmonious classroom environments, free from the distraction of behavioural challenges:

> Just overall having a warm, positive classroom environment, the kids are happier in themselves as well because before, if you were constantly roaring or giving out, it drains you and it's not good. (T17)

> In general (the IYTP techniques are) a dream to use with the classes. (T1)

Teachers reported that they were implementing several of the IYTP strategies consistently in the classroom. The most commonly recommended strategy was that of 'proximal praise'; that is, praising a pupil who is behaving appropriately to reduce the misbehaviour and promote prosocial behaviour amongst the praised child's peers. The perceived simplicity of the technique, its ease of implementation and its perceived

Table 2. Summary of observed teacher behaviour at baseline, 6 months and 12 months*.

	Mean (SD) raw scores ($n = 11$)			Baseline vs. 6 months		Baseline vs. 12 months		6 months vs. 12 months	
	Baseline	6-month follow-up	12-month follow-up	Mean diff (95% CI) p value	Effect size (95% CI)	Mean diff (95% CI) p value	Effect size (95% CI)	Mean diff (95% CI) p value	Effect size (95% CI)
Teacher positives	68.7 (19.4)	85.0 (16.4)	85.9 (22.9)	16.34 (4.2 to 28.5), .01	0.9 (0.4 to 1.0)	17.18 (0.2 to 34.2), .05	0.84 (0.0 to 1.0)	0.85 (−9.8 to 11.5), .86	0.03 (−0.8 to 0.9)
Teacher praise	27.9 (9.6)	32.7 (9.8)	34.8 (18.0)	4.82 (−3.6 to 13.2), .23	0.62 (−0.5 to 0.9)	6.88 (−6.6 to 20.3), .28	0.57 (−0.5 to 0.9)	2.07 (−5.8 to 9.9), .57	0.25 (−0.7 to 0.9)
Teacher negatives	17.0 (13.1)	7.9 (9.5)	5.8 (5.2)	−9.04 (−13.3 to −4.8), .001	−0.96 (−1.0 to −0.9)	−11.18 (−18.2 to −4.2), .01	−0.93 (−1.0 to −0.6)	−2.14 (−6.1 to 1.8), .26	−0.59 (−0.9 to 0.5)
Indirect commands	50.5 (14.9)	50.0 (11.7)	37.9 (9.1)	0.45 (−10.5 to 9.6), .92	−0.01 (−0.8 to 0.8)	−12.59 (−21.7 to −3.5), .01	−0.9 (−1.0 to −0.4)	−12.15 (−17.1 to −7.3), <.001	−0.97 (−1.0 to −0.9)
Direct commands	18.2 (12.1)	19.0 (9.5)	19.0 (8.9)	0.79 (−10 to 11.6), .87	0.03 (−0.8 to 0.9)	0.74 (−9.5 to 11.0), .88	0.03 (−0.8 to 0.9)	−0.05 (−4.8 to 4.7), .98	0.00 (−0.8 to 0.8)
No opportunity	8.2 (5.5)	8.9 (4.6)	7.5 (3.4)	0.73 (−2.1 to 3.5), .57	0.25 (−0.7 to 0.9)	−0.73 (−4.2 to 2.7), .65	−0.18 (−0.9 to 0.8)	−1.45 (−4.8 to 1.9), .36	−0.48 (−0.9 to 0.6)

*Note observational data: frequency counts in 15 min using the T-POT.

Table 3. Summary of teacher strategies at baseline, 6 months and 12 months follow-up.

	Mean (SD) raw scores ($n = 11$)			Baseline vs. 6 months		Baseline vs. 12 months		6 months vs. 12 months	
	Baseline	6-month follow-up	12-month follow-up	Mean diff (95% CI) p value	Effect size (95% CI)	Mean diff (95% CI) p value	Effect size (95% CI)	Mean diff (95% CI) p value	Effect size (95% CI)
Total positive strategies – frequencies (min = 1; max = 5)	3.6 (0.7)	4.0 (0.5)	3.7 (0.5)	0.36 (0.02 to 0.7), .04	0.85 (0.0 to 1.0)	0.09 (−0.4 to 0.6), .68	0.16 (−0.8 to 0.9)	−0.27 (−0.6 to 0.0), .08	−0.79 (−1.0 to 0.1)
Total positive strategies – usefulness (min = 1; max = 5)	3.4 (0.9)	4.3 (0.5)	4.2 (0.6)	0.8 (0.4 to 1.3), .00	0.94 (0.8 to 1.0)	0.7 (0.02 to 1.38), .05	0.84 (0.0 to 1.0)	−0.1 (−0.5 to 0.3), .59	−0.24 (−0.9 to 0.7)
Inappropriate strategies – frequencies (min = 1; max = 5)	2.0 (0.5)	1.6 (0.5)	1.6 (0.7)	−0.45 (−0.8 to −0.1), .02	−0.89 (−1.0 to −0.3)	−0.45 (−0.9 to 0.0), .05	−0.83 (−1.0 to 0.0)	0 (−0.4 to 0.4), 1	0 (−0.8 to 0.8)
Inappropriate strategies – usefulness (min = 1; max = 5)	2.4 (0.7)	2.4 (1.0)	1.8 (0.6)	0.1 (−0.4 to 0.6), .68	0.16 (−0.8 to 0.9)	−0.5 (−1.0 to 0.0), .05	−0.83 (−1.0 to 0.0)	−0.6 (−1.4 to 0.2), .14	−0.72 (−0.9 to 0.3)

Table 4. Summary of findings from the Qualitative Study.

A positive classroom environment
Continued use of techniques reduced need for negative strategies, such as, time-out or ignoring
Calmer, more cooperative pupils, less incidences of disruptive behaviour
Clear benefits associated with particular strategies such as proximal praise
Positive teacher–pupil relationships and child adjustment
Greater awareness of socio-emotional behaviour, child development and contextual factors which may impact on child behaviour
Importance of teacher–pupil relationship and role of teacher in encouraging appropriate behaviour
Increased use of positive reinforcement strategies to encourage and support child
Improved teacher confidence and well-being
Greater confidence and ability to manage class
Less stress and feelings of isolation
Ease of use and practical benefits
All teachers would recommend the IYTP to a colleague
All teachers reported satisfaction with course content and ease of use
Barriers/challenges
Less successful with older children (10 years plus), smaller class groupings or children with behavioural/learning disorders

positive outcomes, were noted as particularly helpful when managing low-level classroom disruption, such as inattention and attention-seeking behaviour:

> Proximal praise – it's unreal how well that works within a classroom environment. If someone isn't sitting down, instead of roaring 'sit down', you just compliment someone and say 'oh so and so is sitting lovely and quietly'. (T17)

> It's amazing actually. The (technique) that just shines is the proximal praise and each day they don't get tired of it, each day if I praise someone, you see them all sit still. (T15)

There was a common perception that the classroom management methods used prior to IYPT training were less effective, thereby resulting in some degree of tension between teachers and pupils. However, the continued implementation of the training techniques had led to less negative behaviour within the classroom, and further reduced the need for strategies such as time-out and ignoring. Consequently, general pupil misbehaviour became a less frequent occurrence between the 6- and 12-month follow-ups. At 12 months, teachers were adept in their use of new classroom practices and had appeared to successfully transfer these techniques to a new class cohort:

> I'm not as stressed because I've more strategies up my sleeves. You might have gotten very cross with a child who was like jumping up and down, but now it's like ignore and redirect and give them something else to do and if they won't, just maybe let them read a book. (T1)

> Like this year, I find I don't have to use much of the (problem behaviour management) strategies, whereas last year I was being very conscious of them and being very aware of them and because I had a more challenging class, I felt I had to use them every day. (T11)

Overall, the IYTP appeared to offer teachers a means of creating an enhanced classroom climate in the longer term with new groups of children. Teachers were increasingly implementing the more positive and preventative classroom management strategies in the longer term in preference to aversive disciplining techniques. They also reported considerable commitment to the programme and its principles, thereby suggesting that they found the IYTP training to be both easy to implement and useful.

Positive teacher–pupil relationships and child adjustment

The IYTP training had also encouraged teachers to consider more carefully their role in managing pupil behaviour. They found that the application of the IYTP strategies to promote child development were helpful in addressing pupil misbehaviour. Specifically, they reported that knowledge of child development gave them a greater appreciation of their potential role in influencing child behaviour. By contrast, the findings at baseline reflected a belief that a child's behaviour was largely determined by factors outside a teacher's direct control (e.g. primarily stemming from the home). The findings suggest that teachers had shifted their focus away from the management of misbehaviour, towards proactively engaging the child through newly adopted techniques such as positive reinforcement that encourage appropriate behaviour and help the child to feel more valued:

> I had to make time because I think you can go 'I don't have time to talk to him, I don't have time to read him a story', but it was just making myself make time for them and just make more effort to build the relationship. (T11)

> I'm very aware of building up the positive relationship with the child. Spending time with them in the morning, positive reinforcement of behaviour and proximal praise. (T7)

Similarly, the programme highlighted the contextual factors which can often have a significant bearing on a child's academic performance. Teachers became increasingly aware of the environmental factors (e.g. parental education, unemployment or poverty) which may influence child behaviour in the classroom. Consequently, children who did not readily participate in class activities, or who were previously withdrawn, were seen to benefit from the programme:

> She was too serious and wouldn't smile and just had a really serious 'head on her'. So I just worked on her with the Happygrams and the praise and the parents came in then two weeks ago … after two months of school and you know … she's a totally changed personality. (T1)

> Some of the kids would have opened up and told me stuff that I would definitely not have been aware about and I don't think that would have come out unless I had built up the relationship with them because I don't think they would have felt at ease. (T17)

Improved teacher confidence and well-being

At baseline, interviews with teachers revealed low levels of teacher confidence, both in their ability to deal with inappropriate behaviour and in their own overall classroom management abilities. Post-intervention, teachers indicated that they felt more empowered as a direct result of training and better equipped to deal with challenging classroom behaviour:

> I'd be more knowledgeable now and more confident to deal with behaviour within my classroom … So I suppose I'd be a more confident teacher in some ways, definitely in relation to dealing with behavioural issues. (T17)

Teachers also reported feeling less isolated. Baseline reports indicated that some teachers felt reluctant or uncomfortable seeking advice or assistance from colleagues on classroom management issues. The social support and awareness of similar challenges faced by other teachers was regarded as an invaluable aspect of the programme:

> It was great hearing from other teachers about things like – they'd have bold behaviours in their classroom and … to hear what they do and their experience, so that you don't feel like you're the only one. (T1)

> Sharing stories was brilliant, because you're always thinking you're the worst … And then I went and I heard stories from other teachers and I kind of went 'right, you're not so bad here now. There's a lot worse out there!'. (T15)

The emotional well-being of teachers had also improved post-IYTP training. Prior to the training, teachers struggled to combine classroom management with curriculum teaching duties and often reported feeling stressed or drained as a result. Training provided teachers with a reserve of tools which they could utilise to support their teaching tasks. For instance, techniques were employed to ignore minor incidents of misbehaviour and to maintain composure when dealing with stress-provoking situations:

> … the techniques to just kind of de-stress, not to get so bogged down, definitely was a help and I don't feel as kind of stressed out in the classroom as I would have before. So it's definitely better all round, yeah – for teacher and children! (T15)

Process and practice – implementation of programme

In general, teachers found the IYTP easy to implement in the classroom and identified real and practical benefits in terms of instructional practice, increased self-efficacy and an improved understanding of child problem behaviour and effective classroom management. At the 12-month follow-up, teachers were increasingly aware of their role in promoting positive child adjustment and the strategies required to address difficult behaviours. Two teachers reported that the use of new practices had become an automatic process whilst another felt that continued use of the strategies would facilitate their integration into existing classroom routines:

> We all know what we should be doing, and praising and using verbal cues but you just forget that with everything that is going on that it can go out the window. So I think it's making a conscious decision that 'today I'm going to really try to use this. (T11)

Another factor in successful programme implementation was its short duration and the relatively minor workload requirements. Despite the additional work involved with participating in the RCT (e.g. questionnaire completion), none of the teachers felt that the demands placed upon them were excessive.

Some challenges and barriers to the implementation and utility of the strategies were noted. While the training was largely welcomed by teachers, some difficulties

with certain learning tools/approaches were evident. A frequently noted criticism was the perceived over-repetition of certain topics (e.g. ignoring minor misbehaviour) and the overly long training day:

> I thought that it was a very long day and we really had grasped the concept very early on and it was flogged to death. (T7)

Similarly, the use of role play was regarded by some to be 'patronising' whilst others considered the use of vignettes (brief audiovisual clips) as 'over-used' and more culturally relevant to America. Certain techniques were also found to be less successful for a minority of children, such as those with more demanding needs or a behavioural/learning disorder:

> There always seems to be one kid in every class that'll just wear you out like, you know? And you need to keep changing things I suppose with them. They'll work for a time but then they'll get bored of it. (T1)

Some environmental barriers to implementation, such as pupil age and class size, were also highlighted. For example, group rewards were considered less applicable with smaller class cohorts while some reward strategies were believed to be ineffective with older children (e.g. 10 years). Teachers also reported potential longer-term challenges to implementation. For three teachers, the most significant perceived barrier was that of forgetting, or becoming distracted. It was noted that the hectic pace and demanding nature of a junior classroom environment can often undermine the teachers' ability to draw on more preventative and positive classroom management strategies.

Discussion

In the current study, a mixed-methods approach was used to provide, for the first time, an assessment of the longer-term utility and implementation of the IYTP in a sample of Irish primary schools. Importantly, the collective findings from observations, questionnaires and interviews, albeit based on a small sample of teachers, suggest that the IYTP had led to longer-term benefits for teacher classroom management, teacher well-being, and the classroom environment. Given the typically greater prevalence of behavioural difficulties in disadvantaged areas, these findings underscore the potential value of the training for teachers who work in schools serving the more disadvantaged. All teachers indicated their satisfaction with the training programme in terms of its content, delivery methods, and its positive outcomes for children, although there were a number of challenges to implementation. Overall, the training was highly valued by all teachers and the strategies were viewed as easy to implement. These findings are important because if teachers perceive positive strategies as useful, then they are more likely to be implemented (Carlson et al. 2011).

Improved teacher–pupil relationships and student prosocial skills were evident at 12 months, particularly with regard to promoting positive classroom behaviour. Teachers also reported more positive classroom environments and teacher–pupil interactions. Positive teacher-student interactions have been shown to encourage academic engagement and achievement (Hamre and Pianta 2005; Jennings and Greenberg 2009). Our findings show that teachers continued to favour the use of positive management strategies over more negative or aversive classroom management

strategies. A significant reduction in the use of indirect commands at the 12-month follow-up, also indicates that teachers were giving children fewer vague and indirect instructions. Thus, they appeared to have transferred the newly acquired classroom management skills to a new classroom context. An increased awareness and understanding of the strategies designed to enhance children's socio-emotional competencies and academic learning, was also acknowledged by all teachers as an essential component of the training.

The intervention helped to reduce the overall level of misbehaviour in the classroom, whilst also reducing the time spent attending to incidences of inappropriate and disruptive behaviour. Proximal praise, in particular, emerged as the most commonly implemented strategy in reducing and managing inappropriate behaviour. While teachers' self-reported use of positive strategies showed no change between baseline and 12 months, the observational data demonstrated significant improvements in the implementation of positive techniques, suggesting that teachers may have under-reported their use within the classroom. Whilst this inconsistency may be due to measurement issues, it is not possible to be definitive without undertaking further research. However, the use of such proactive, positive strategies can be beneficial both in terms of socio-emotional adjustment and academic engagement and achievement in young children (Arthur, Gordon, and Butterfield 2003; Sugai and Horner 2002; Sutherland et al. 2008).

In some instances, strategies were viewed by teachers as limited in their effectiveness. These were perceived as being less useful for students with complex learning and behavioural disorders, whilst older students were also considered to benefit less from the programme. Nevertheless, benefits for teachers' confidence, self-efficacy, sense of isolation and stress in classroom management and instructional practice were widely reported. These findings are in line with those of Baker-Henningham and Walker (2009) and further suggest that the programme may have benefits for teacher well-being in longer run.

It is also important to note the contextual, and specifically environmental, factors which play an important role in the adoption of behavioural interventions. Prior to programme implementation, a wide range of challenging behaviours, from low-level attention difficulties to incidences of physical aggression, were reported by teachers in the classroom. The home environment was also widely acknowledged to have a profound effect on classroom behaviour. Behavioural challenges were managed by teachers through a combination of their own skills, available resources, and interpersonal support offered by other school staff. Although all schools had a detailed behavioural code to support decision-making processes around the management of misbehaviour, support for teachers varied across schools. In the current study, six teachers reported a lack of resources for supporting children (in terms of inclusion and behaviour management) in the infant classroom. This was particularly evident in the non-DEIS schools, where teachers noted insufficient resources for the management of behavioural difficulties when compared to the level of support given to their counterparts in DEIS schools (including the provision of home-school liaison teachers). However, no differences in outcomes were found between DEIS and non-DEIS schools, suggesting that despite the additional resources allocated to disadvantaged schools, the intervention promoted positive outcomes regardless of school status. It is also important to recognise the role of school principals who endorsed and supported on an ongoing basis, the use of the training programme in their schools.

Study strengths and limitations

This is the first study to examine the longer-term implementation and utility of the IYTP as a stand-alone intervention and to assess the extent to which its strategies can be successfully transferred to new classrooms at 12-months post-intervention. The study had an excellent intervention attendance rate as well as no teacher attrition at the 6- or 12-month follow-ups. Teachers' self-reports of their classroom management practices were corroborated by observational reports carried out by trained researchers and a mixed-methods approach was used to strengthen the findings. Specifically, the qualitative study revealed a number of interesting findings that built upon the quantitative data, such as a greater awareness of the contextual/environmental factors which may affect a child's behaviour, the impact of teacher behaviour on child behaviour, and improvements in teacher well-being and confidence as a result of the training programme.

With regard to the study limitations, the sample size of 11 teachers was small and may limit, to some extent, the generalisability of the findings from the self-report TSQ. Our previous short-term evaluation of the IYTP included a WLC group who subsequently received the intervention (after 6-month follow-up); thus, comparisons with a control group at the 12-month follow-up were not possible. However, this approach is frequently used in RCTs of parenting interventions and is considered ethically appropriate (e.g. Bywater et al. 2011). For the same reason, researchers (and observers) were not blind to condition at the 12-month post-baseline follow-up assessment. Second, due to staff rotation within the schools, teachers had moved to new classrooms at the follow-up time point, thereby precluding the possibility of a comparative analysis of the intervention and control groups. It is possible that the trained teachers had been allocated to new a class with either fewer (or more) children with challenging behaviour. The characteristics and behaviour of this new cohort of children is likely to have had an impact on teacher behaviour. Third, the higher levels of commitment by teachers to the training compared to other 'typical' IY trainee cohorts may also have contributed to positive programme outcomes. According to the programme facilitators, participants were exceptionally motivated and driven, both towards continuing professional development and, crucially, towards the creation of positive child outcomes. Thus, it is possible that less homogenous findings may have emerged from a larger more diverse sample. Fourth, the 12-month post-baseline follow-up assessment was carried out towards the beginning of a new academic year. Hence, teachers who were observed at this juncture were teaching a cohort of children who had only received a few months' exposure to the IYTP strategies and, consequently, may not have benefitted from the full effects of the intervention. Lastly, it is important to note the contextual factors such as socio-economic status, family adjustment, parental income, parental education, etc. that can have a profound impact on child behaviour in a school context. In this study, all teachers regarded the cause of behavioural difficulties as multifaceted, although the home environment was cited as a particularly important factor in determining disruptive behaviour in the classroom. However, we were unable to assess child behaviour outcomes in the home environment, or to assess academic or learning outcomes which, as indicated earlier, may be negatively affected by behavioural problems in the classroom.

Implications for practice

At baseline, half of the interview participants openly acknowledged their use of 'negative' classroom management strategies. Our results suggest that an in-service, teacher

classroom management training programme can support teachers in the use of proactive strategies which, in turn, can help to foster positive teacher–pupil relationships, child socio-emotional development and learning progression, The programme also helped to promote a greater understanding amongst teachers, of the numerous issues affecting pupil behaviour. Teachers' awareness of their attitudes and emotional responses towards challenging behaviour is fundamental to effective classroom management.

Teacher training interventions may also lead to longer run improvements in teacher classroom management skills and help teachers to develop appropriate preventative strategies for managing pupil misbehaviour. The provision of an orderly learning environment through effective teacher classroom management, can help to promote positive schooling experiences for all children, especially those at risk of poor outcomes (INTO 2005). Our findings suggest, albeit tentatively in the context of the study limitations, that interventions such as the IYTP, can provide in-service, professional development training opportunities for existing teaching staff, and promote positive discipline and teacher–pupil interactions in the classroom. However, a need for further research is indicated.

Acknowledgements

We are grateful to all of the teachers, principals and other school personnel who so generously gave of their time to participate in this research. We would also like to thank Archways for supporting the research as well as Dr Pam Martin (Bangor University, Wales) and Dr Mairead Furlong (National University of Ireland Maynooth) for their assistance during the study.

Funding

The Incredible Years Ireland Study was funded by Archways with support from The Atlantic Philanthropies.

Notes

1. The GUI Study is a national longitudinal study of children which explores the developmental and well-being outcomes of infants and 9-year-old children.
2. The PEII is a funding partnership between the Irish Government and The Atlantic Philanthropies to support model projects in disadvantaged areas.
3. The Delivering Equality of Opportunity in Schools (DEIS) scheme targets educational disadvantage through the provision of additional resources in schools with higher numbers of disadvantaged pupils. These include lower class sizes, Home School Community Liaison Services, School Meals Programme and access to additional numeracy and literacy supports (Department of Education and Science 2005).
4. Newly Qualified Teachers.
5. Archways is an NGO which works to promote and implement evidence-based programmes for children and young people.

Notes on contributors

Yvonne Leckey is currently a researcher in the Mental Health and Social Research Unit (MHSRU), Maynooth University.

Dr Lynda Hyland is a Senior Lecturer in Psychology.

Gráinne Hickey is a senior researcher and currently Research Programme Manager in the Mental Health and Social Research Unit.

Dr Anne Lodge is Principal of the Church of Ireland College of Education.

Paul Kelly was formerly a Data Manager in the Mental Health and Social Research Unit, Maynooth University.

Professor Tracey Bywater is Professor of Family Well Being at York University.

Professor Catherine Comiskey is a biostatistican and currently Head of the School of Nursing and Midwifery at Trinity College Dublin.

Professor Michael Donnelly is Head of the Health Services Research Group in the Institute of Health at Queen's University Belfast and Deputy Director of the UKCRC Centre of Excellence for Public Health (NI).

Dr Sinéad McGilloway is Director of the Mental Health and Social Research Unit and leads the Health, Mental Health and Community Psychology research strand in Maynooth University Department of Psychology.

ORCID


Yvonne Leckey http://orcid.org/0000-0001-6257-8105

References

Arthur, M., C. Gordon, and N. Butterfield. 2003. *Classroom Management: Creating Positive Learning Environments*. Victoria: Thomson.

Baker-Henningham, H., S. Scott, K. Jones, and S. Walker. 2012. Reducing Child Conduct Problems and Promoting Social Skills in a Middle-Income Country: Cluster Randomised Controlled Trial. *British Journal of Psychiatry* 201: 101–108.

Baker-Henningham, H., and S. Walker. 2009. "A Qualitative Study of Teacher's Perceptions of an Intervention to Prevent Conduct Problems in Jamaican pre-Schools." *Child: Care, Health and Development* 35 (5): 632–642.

Baker-Henningham, H., S. Walker, C. Powell, and J. M. Gardner. 2009. "A Pilot Study of the Incredible Years Teacher Training Programme and a Curriculum Unit on Social and Emotional Skills in Community pre-Schools in Jamaica." *Child: Care, Health and Development* 35: 624–631.

Banks, J., and S. McCoy. 2011. *A Study on the Prevalence of Special Educational Needs*. Trim: NCSE.

Barrett, P. M. 2004. *Friends for Life! For Children*. Participant Workbook and Leader's Manual. Brisbane: Australian Academic Press.

Barrish, H. H., M. Saunders, and M. M. Wolf. 1969. "Good Behavior Game: Effects of Individual Contingencies for Group Consequences on Disruptive Behavior in a Classroom." *Journal of Applied Behavior Analysis* 2 (2): 119–124.

Bywater, T., J. Hutchings, C. Whitaker, C. Evans, and L. Parry. 2011. "The Incredible Years Therapeutic Dinosaur Programme to Build Social and Emotional Competence in Welsh Primary Schools: Study Protocol for a Randomised Controlled Trial." *Trials* 12: 39.

Carlson, J., H. Tiret, S. Bender, and L. Benson. 2011. "The Influence of Group Training in the Incredible Years Teacher Classroom Management Program on Preschool Teachers' Classroom Management Strategies." *Journal of Applied School Psychology* 27 (2): 134–154.

Clunies-Ross, P., E. Little, and M. Kienhuis. 2008. "Self-reported and Actual use of Proactive and Reactive Classroom Management Strategies and Their Relationship with Teacher Stress and Student Behaviour." *Educational Psychology* 28 (6): 693–710.

Cohen, J. 1988. *Statistical Power Analysis for the Behavioral Sciences*. 2nd ed. Hillsdale, NJ: Lawrence Earlbaum.

Department of Education and Science. 2005. *Delivering Equality of Opportunity in Schools: An Action Plan for Educational Inclusion*. Dublin: Department of Education and Science.

Department of Education and Science. 2006. *Learning to Teach: Students on Teaching Practice in Irish Primary Schools*. Dublin: Stationery Office.
Drew, E. 2006. *Facing Extinction? Why Men are not Attracted to Primary Teaching*. Dublin: Liffey Press.
Duck, L. 2007. "Using Sounder Foundations to Help Avoid the "why new Teachers cry" Phenomenon." *The Clearing House: A Journal of Educational Strategies, Issues and Ideas* 81: 29–36.
Fergusson, D. M., L. J. Horwood, and L. Stanley. 2013. "A Preliminary Evaluation of the Incredible Years Teacher Programme." *New Zealand Journal of Psychology* 42 (2): 51–56.
Friedman, I. A. 2006. "Classroom Management and Teacher Stress and Burnout." In *Handbook of Classroom Management: Research, Practice, and Contemporary Issues*, edited by C. M. Evertson and C. S. Weinstein, 925–944. Mahwah, NJ: Lawrence Erlbaum.
Greene, R. W., S. K. Beszterczey, T. Katzenstein, K. Park, and J. Goring. 2002. "Are Students with ADHD More Stressful to Teach? Patterns of Teacher Stress in an Elementary School Sample." *Journal of Emotional and Behavioral Disorders* 10 (2): 79–89.
Hamre, B. K., and R. C. Pianta. 2005. "Can Instructional and Emotional Support in the First-Grade Classroom Make a difference for Children at Risk of School Failure?" *Child Development* 76 (5): 949–967.
Hickey, G., S. McGilloway, L. Hyland, Y. Leckey, P. Kelly, T. Bywater, C. Comiskey, A. Lodge, M. Donnelly, and D. O'Neill. 2015. "Exploring the Effects of a Universal Classroom Management Training Programme on Teacher and Child Behaviour: A Group-Randomised Controlled Trial and Cost Analysis." *Journal of Early Childhood Research*. doi:10.1177/1476718X15579747.
Hutchings, J., D. Daley, K. Jones, P. Martin, T. Bywater, and R Gwyn. 2007. "Early Results from Developing and Researching the Webster-Stratton Incredible Years Teacher Classroom Management Training Programme in North West Wales." *Journal of Children's Services* 2 (3): 15–26.
Hutchings, J., P. Martin, D. Daley, and M. E. William. 2013. "The Effects of a Teacher Classroom Management Programme on the Classroom Behaviour of Children with and Without Behaviour Difficulties." *Journal of School Psychology* 51: 571–585.
Hyland, L., G. Ní Mháille, S. McGilloway, and A. Lodge. 2014. "Emotional and Behavioural Difficulties in Young, School-Going Children in Ireland: Prevalence and Teacher Response." *School Psychology International* 35 (5): 516–529. doi:10.1177/0143034313515984.
Irish National Teachers' Organisation. 2004. *Managing Challenging Behaviour*. Dublin: Irish National Teachers' Organisation.
Irish National Teachers' Organisation. 2005. *Towards Positive Behaviour in Primary Schools*. Dublin: Irish National Teachers' Organisation.
Irish National Teachers' Organisation. 2012. *Wellbeing in the Classroom: Discussion Document and Proceedings of the Consultative Conference on Education 2012*. Dublin: Irish National Teachers' Organisation.
Janus, M., and E Duku. 2007. "The School Entry gap: Socioeconomic, Family, and Health Factors Associated with Children's School Readiness to Learn." *Early Education and Development* 18 (3): 375–403.
Jennings, P., and M. Greenberg. 2009. "The Prosocial Classroom: Teacher Social and Emotional Competence in Relation to Student and Classroom Outcomes." *Review of Educational Research* 79 (7): 491–525.
Kiernan, G., N. Axford, M. Little, C. Murphy, S. Greene, and M Gormley. 2008. "The School Readiness of Children Living in a Disadvantaged Area in Ireland." *Journal of Early Childhood Research* 6 (2): 119–144.
Kusché, C. A., and M. T. Greenberg. 1994. *The PATHS (Promoting Alternative Thinking Strategies) Curriculum*. South Deerfield, MA: Channing-Bete.
Martin, P. A., D. Daley, J. Hutchings, K. Jones, C. Eames, and C. J. Whitaker. 2010. "The Teacher-Pupil Observation Tool (T-POT): Development and Testing of a New Classroom Observation Measure." *School Psychology International* 31 (3): 229–249.
Marzano, R. J., and J. S. Marzano. 2003. The Key to Classroom Management. *Building Classroom Relationships* 61 (1): 6–13.

Pope, C., S. Ziebland, and N. Mays. 2000. "Qualitative Research in Health Care: Analysing Qualitative Data." *British Medical Journal* 320 (7227): 114–116.
Qi, C. H., and A. P Kaiser. 2003. "Behavior Problems of Preschool Children from Low-Income Families Review of the Literature." *Topics in Early Childhood Special Education* 23 (4): 188–216.
Reiss, F. 2013. "Socioeconomic Inequalities and Mental Health Problems in Children and Adolescents: A Systematic Review." *Social Science and Medicine* 90: 24–31.
Robinson, E. A., and S. M. Eyberg. 1982. "The Dyadic Parent-Child Interaction Coding System: Standardization and Validation." *Journal of Consulting and Clinical Psychology* 49: 245–250.
Smyth, E., S. McCoy, and G. Kingston. 2015. *Learnings From the Evaluation of DEIS: Research Series No. 39*. Dublin: Economic and Social Research Institute.
Statham, J. 2013. *Prevention and Early Intervention in Children and Young People's Services - Improving Child Behaviour*. Dublin: Centre for Effective Services.
Stormont, M., W. Reinke, and K. Herman. 2011. "Teachers' Knowledge of Evidence-Based Interventions and Available School Resources for Children with Emotional and Behavioral Problems." *Journal of Behavioral Education* 20 (2): 138–147.
Stoughton, E. H. 2007. ""How Will I get them to Behave?" Pre-Service Teachers Reflect on Classroom Management." *Teaching and Teacher Education* 23: 1024–1037.
Sugai, G., and R. Horner. 2002. "The Evolution of Discipline Practices: School-Wide Positive Behavior Supports." *Child & Family Behavior Therapy* 24 (1–2): 23–50.
Sutherland, K., T. Lewis-Palmer, J. Stichter, and P. Morgan. 2008. "Examining the Influence of Teacher Behavior and Classroom Context on the Behavioral and Academic Outcomes for Students with Emotional or Behavioral Disorders." *The Journal of Special Education* 41 (4): 223–233.
Tapp, J., J. Wehby, and D. Ellis. 1995. "A Multiple Option Observation System for Experimental Studies: MOOSES." *Behavior Research Methods, Instruments, & Computers,* 27: 25–31.
Webster-Stratton, C. 2005. *Teacher Classroom Management Strategies Questionnaire*. http://www.incredibleyears.com/Resources/teacher-strategies-questionn-aireamericanversion.pdf.
Webster-Stratton, C. 2006. *The Incredible Years Teacher Classroom Management Program*. Seattle, WS: C. Webster-Stratton.
Webster-Stratton, C. 2011. *The Incredible Years: Parents, Teachers and Children's Training Series*. Seattle, WA: Incredible Years.
Webster-Stratton, C., and K. C. Herman. 2010. "Disseminating Incredible Years Series Early-Intervention Programs: Integrating and Sustaining Services Between School and Home." *Psychology in the Schools* 47: 36–54.
Webster-Stratton, C., and J. M. Reid. 2004. "Strengthening Social and Emotional Competence in Young Children: The Foundation for Early School Readiness and Success: Incredible Years Classroom Social Skills and Problem-Solving Curriculum." *Infants and Young Children* 17 (2): 96–113.
Webster-Stratton, C., J. M. Reid, and M. Hammond. 2004. "Treating Children with Early-Onset Conduct Problems: Intervention Outcomes for Parent, Child, and Teacher Training." *Journal of Clinical Child and Adolescent Psychology* 33 (1): 105–124.
Webster-Stratton, C., J. M. Reid and M. Stoolmiller. 2008. "Preventing Conduct Problems and Improving School Readiness: Evaluation of the Incredible Years Teacher and Child Training Programs in High- Risk Schools." *Journal of Child Psychology and Psychiatry* 49 (5): 471–488.
Webster-Stratton, C., W. M. Reinke, K. C. Herman, and L. L. Newcomer. 2011. "The Incredible Years Teacher Classroom Management Training: The Methods and Principles that Support Fidelity of Training Delivery." *School Psychology Review* 40 (4): 509–529.
Williams, J., S. Greene, E. Doyle, E. Harris, R. Layte, S. McCoy, C. McCrory, et al. 2009. *Growing up in Ireland: National Longitudinal Study of Children –the Lives of Nine Year Olds*. Dublin: Department for Children and Youth Affairs.