Screening and Classroom Interventions For Inattentive, Hyperactive and Impulsive Young Children – A Longitudinal Study

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Abstract

This three-year research project evaluated the impact of different non-medical interventions on the achievement, attitude and behaviour of severely inattentive, hyperactive and impulsive children. The outcomes were intended to inform policy and practice.

A single cohort from two thousand schools across England was monitored between the start of school and age 7 years. Additional data about school and district policies for assisting children with Special Educational Needs were collected.

This paper describes the multi-level randomised controlled design of the research within the context of a monitoring system and reports on the achievement and progress of severely inattentive, hyperactive and impulsive children, their teachers' quality of life, and the actions taken by schools and local authorities in relation to the interventions.

Objectives and Theoretical framework

Many children appear inattentive and perhaps also hyperactive and impulsive at a more frequent and severe level than that of other children of the same age, developmental level and gender. Their behaviour is characterised by the criteria for the diagnosis of Attention Deficit Hyperactivity Disorder (ADHD) in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM IV, American Psychiatric Association,1994).

ADHD is currently divided into three main sub-types:
a) Combined subtype
The individual displays symptoms of inattention, hyperactivity and impulsiveness.
b) Predominantly Inattentive subtype
The individual mainly displays symptoms of inattention.
c) Predominantly Hyperactive-Impulsive subtype
The individual mainly displays symptoms of hyperactivity and impulsiveness. Inattention may also be apparent but to a lesser degree than the combined type.

The prevalence of children with ADHD has been estimated to be between 3% and 5% of the population (American Psychiatric Association, 1994). To be diagnosed with ADHD, behavioural problems must be observed in at least two different environments. The proportion of children observed by their teachers to display severe ADHD symptoms in the classroom setting is somewhat higher and has been estimated to be between 8.1% and 17% (Merrell and Tymms, 2001, Gaub and Carlson, 1997, Wolraich, Hannah, Pinnock, Baumgaertel, and Brown, 1996). This is a significant proportion of the school population.

Pupils diagnosed as having ADHD are more likely to display delinquent, antisocial behaviour as adolescents and achieve lower grades at school than their peers (Nussbaum et al., 1990; Barkley et al., 1991). Merrell and Tymms (2001) found that these negative outcomes for lower grades extend to children aged 4 to 7 years who are severely inattentive, hyperactive or impulsive in the classroom but do not have a formal diagnosis of ADHD. They tracked the mathematics and reading progress of a cohort of children over their first three years at school. Additionally all children were assessed at the end of their first year at school by their class teacher using a behaviour rating scale, which was based upon the American Psychiatric Association's criteria. Large differences in reading and maths achievement (Effect Sizes of up to 1.14) were found between children who did not meet any criteria on the behaviour rating scale and children who met a high number of criteria. The differences increased over time. Given the significant proportion of children who are severely inattentive, hyperactive and impulsive in the classroom, these findings raise two issues:
a) Should screening procedures be put in place for the early identification of young children with severe ADHD symptoms? What impact would such a strategy have on the outcomes of these children?
b) Is it beneficial to provide teachers, schools and other professionals working with young children with severe ADHD symptoms research-based advice on how to teach them and manage their behaviour?

This paper reports findings from a recently completed large-scale intervention study that aimed to investigate the above issues. The interventions were implemented within the framework of the Performance Indicators in Primary Schools (PIPS) monitoring programme (Tymms 1999, www.cem.dur.ac.uk). The interventions and subsequent analysis were funded by the Economic and Social Research Council (ESRC) award number R000223798.

Data Sources and Methods

Data for this study came from schools that were part of the Performance Indicators in Primary Schools (PIPS) monitoring project run by the Curriculum Evaluation and Management (CEM) Centre, University of Durham. PIPS is paid for by participating schools and it enables teachers to monitor the progress of pupils as they move through primary school, (see for example Tymms, Merrell and Henderson, 2000, Tymms,1999). Assessments that have been developed by PIPS are administered and then returned to the CEM Centre where they are marked and analysed. Detailed, confidential, feedback about the attainment and progress of pupils in relation to nationally representative data is returned to schools. In addition to individual schools choosing to join the PIPS Project, some Local Education Authorities (LEAs) pay for all schools within their district to use PIPS assessments and coordinate the process. In that case the data are shared with the LEA as well as the school. As a consequence of this system, the CEM Centre holds a large dataset, tracking pupils longitudinally. The project analyses data from almost half a million pupils every year.

The sample of pupils in the analyses that follow comprised a single cohort of pupils who started school aged 4 to 5 years in the 2000/2001 academic year. 73,367 pupils from 2040 schools in Britain were included in the ESRC-funded research project. Additionally, 24 of the LEAs that coordinated the use of PIPS assessments in the 2000/2001 academic year chose to participate in the study.

At the start of the reception year, the reading and mathematics development and phonological awareness of pupils were assessed with the PIPS On-Entry Baseline assessment.

At the end of the reception year, pupils were assessed with the same assessment. The behaviour of pupils was assessed at this time by class teachers who completed an 18-point rating scale which closely was closely based on the criteria for the diagnosis for ADHD in the DSM IV. The full behaviour rating scale can be found in the Appendix.

Further data were collected when the pupils were in Year 2. Six hundred and forty three schools chose to assess their pupils with the PIPS Assessment 2 which included measures of reading, mathematics and attitudes to reading, mathematics and school. All schools were required to assess their pupils with the end of Key Stage 1 assessments as a statutory requirement within England and these data were requested from schools participating in the study. At the same time questionnaires were sent to the Year 2 class teachers, head teachers and LEA personnel. The teacher questionnaires requested information about the behaviour of pupils, whether or not any children had been prescribed medication for ADHD, interventions used with specific pupils and the teachers' quality of life. The head teacher questionnaires requested information about school level interventions and policies. The LEA questionnaires requested information about LEA level interventions and policies. Copies of the questionnaires can be found in the Appendix.

Table 1 shows details of the assessments, timing, variables and sample sizes.

Table 1 Details of Assessments, Variables and Sample

Assessment	Timing	Variables	Sample
PIPS On-Entry Baseline Assessment. Administered by teachers.	Start of school (reception year), September 2000 onwards.	Reading, Mathematics.	2,005 schools, 65,440 pupils.
PIPS On-Entry Baseline Assessment Follow-up. Administered by teachers. Behaviour rating scale completed by teachers.	End of the reception year, June 2001.	Reading, Mathematics, Behaviour (based on the diagnostic criteria for ADHD in the DSM IV), Attitudes.	2,040 schools, 68,711 pupils.
PIPS Assessment 2. Administered by school staff.	Spring term of Year 2, January 2003.	Reading, Mathematics, Attitudes.	643 schools, 17,417 pupils.
End of Key Stage 1 Statutory Assessment. Administered by school staff.	Summer term of Year 2, June 2003.	Reading, Mathematics.	621 schools, 18,304 pupils.
Re-assessment of behaviour. Completed by Year 2 class teachers.	Spring term of Year 2, February 2003.	Inattentive, Hyperactive and Impulsive Behaviour.	864 schools, 25,482 pupils.
Medication summary. Completed by Year 2 class teachers.	Spring term of Year 2, February 2003.	Indication of medication prescribed to individual children to treat ADHD.	864 schools, 25,482 pupils.
Pupil level questionnaire. Completed by Year 2 class teachers.	Spring term of Year 2, February 2003.	Details of behaviour modification intervention programme/s (informal or formal) implemented.	864 schools, 25,482 pupils.
School level questionnaire. Completed by Head teachers.	Spring term of Year 2, February 2003.	Details of behaviour modification intervention programme/s with respect to whole class and/or school.	943 schools, 943 Head teachers.
LEA level questionnaire 4 questionnaires sent to each participating LEA	Spring term of Year 2 February 2003	Questionnaire about policies and actions taken related to assisting children with severe inattention, hyperactivity and impulsivity	13 LEAs, 16 staff.
Teacher Quality of Life questionnaire Completed by Year 2 class teachers of the pupils	Spring term of Year 2 February 2003	Quality of Life questionnaire for teachers	884 schools, 1,343 teachers.

At the end of the reception year, interventions aimed at improving the academic outcomes, attitudes and behaviour of severely inattentive, hyperactive and impulsive children were implemented. There were two levels of intervention: school level and district (local education authority, LEA) level. The interventions were randomly assigned at both levels.

The school level interventions are shown in Table 2.

Table 2 School Level Interventions

	Pupils Identified Pupils with high behaviour scores in June 2001 identified to the school in September 2001	**No Identification** Pupils with high behaviour scores remain unidentified
Booklet given School sent booklet with advice about how to teach severely inattentive, hyperactive and impulsive children in January 2002	School Intervention Group 1	School Intervention Group 3
No booklet given School NOT sent an booklet	School Intervention Group 2	School Intervention Group 4

High scores on the DSM IV-based behaviour rating scale conducted at the end of the reception year were defined as meeting 6 or more criteria relating to inattention (Predominantly Inattentive behaviour), or meeting 6 or more criteria relating to hyperactivity/impulsivity (Predominantly Hyperactive/Impulsive behaviour) or meeting 6 or more criteria relating to inattention plus 6 or more criteria relating to hyperactivity/impulsivity (Combined behaviour).

Schools in Intervention Groups 1 and 2 were notified of pupils with high scores on the behaviour rating scale at the end of the reception year.

The information book was written specifically for this study after reviewing the available research about the most effective ways of teaching and managing the behaviour of children with ADHD and research about the causes of inattentive, hyperactive and impulsive behaviour (Merrell and Tymms, 2002a). One copy was sent to each school in Intervention Groups 1 and 3 when the pupils in the sample were in Year 1 (the year following reception).

The LEA level interventions are shown in Table 3.

Table 3 LEA Level Interventions

LEA Intervention Group 1	Conference and Information books
LEA Intervention Group 2	Information books
LEA Intervention Group 3	No conference and no Information book

The conference was held in March 2001 when the pupils were in Year 1. LEAs were invited to send four personnel from a variety of disciplines (e.g. general education advisers, special educational needs advisers, educational psychologists, social service personnel and health workers) to attend the conference free of charge. The conference was intended to inform delegates of the latest research on ADHD and included sessions by leading specialists on the educational achievement and progress of children who are severely inattentive, hyperactive and impulsive, the

nature and causes of severe inattentive, hyperactive and impulsive behaviour in children, teaching and classroom management strategies, the management of services and resources within local authorities.

The information books were sent to LEAs in March 2001 when the pupils were in Year 1. Four copies were sent to each LEA. The book included the same subject content as the school book but was written in a more academic style (Merrell and Tymms, 2002b). Additionally, one copy of the publication 'Attention Deficit Hyperactivity Disorder (ADHD): A Psychological Response to an Evolving Concept', published by the British Psychological Society (1996) was sent to LEA Intervention Groups 1 and 2.

Results

Mathematics and Reading Progress, Attitudes and Behaviour of Pupils in Year 2: Whole Sample

The relative progress and attitudes of pupils were analysed using multilevel models (also known as Hierarchal Linear Models and Variance Component Models) in which pupils were nested in schools, which in turn were nested within LEAs. The major controls were the End Reception Total Score, which was based on reading and mathematics, sex, and behaviour at the end of Reception. When looking at behaviour in Year 2, the major controls were behaviour at the end of reception and sex. The interventions were included in the models together with interaction terms. The analysis of the progress of the whole sample of pupils using multi-variate multi-level models indicated that there were no statistically significant main effects from the interventions implemented at school level on the achievement or attitudes of the pupils as measured in the PIPS data. There was one significant positive outcome in relation to the interactions and that was for the PIPS Year 2 reading outcome for Intervention Group 1 (Information Book and identification of pupils with high scores). The coefficient indicated an advantage of 0.15 standard deviation units. There was also evidence that the more frequently the information book was used, the more positive the attitudes of the pupils (see below). These results were reported in detail in an earlier paper (Tymms and Merrell, 2003).

There were no differences between the LEA level intervention groups.

Mathematics and Reading Progress, Attitudes and Behaviour of Pupils in Year 2: Children with High Scores on the End of Reception Behaviour Rating Scale

It is not unexpected that the interventions did not have a major impact on the whole sample of pupils since they were intended to help children with high scores on the end of reception behaviour rating scale. The analyses that follow focus on the outcomes of those pupils specifically.

The relative progress, attitudes and behaviour of pupils were once again analysed using multilevel models in the same way as described above.

The results from the multilevel analyses are shown in Tables 4 and 5 below. The figures in bold are statistically significant ($p<0.05$).

Table 4 PIPS outcomes for children with high behaviour scores

	Year 2 PIPS Mathematics	Year 2 PIPS Reading	Attitude to Mathematics	Attitude to Reading	Attitude to School
Fixed					
Cons	**0.114 (0.019)**	0.010 (0.019)	**-0.030 (0.015)**	**-0.207 (0.013)**	**-0.164 (0.015)**
End of Reception Total Score	**0.691 (0.007)**	**0.745 (0.007)**	**0.049 (0.009)**	**0.103 (0.008)**	0.001 (0.008)
Sex	**-0.129 (0.013)**	**0.086 (0.012)**	**0.064 (0.015)**	**0.333 (0.014)**	**0.317 (0.015)**
Behaviour Dummy	**-0.198(0.042)**	**-0.172 (0.038)**	-0.090 (0.049)	**-0.085 (0.045)**	**-0.154 (0.047)**
Book X Behaviour Dummy	-0.038(0.059)	0.070 (0.054)	0.131 (0.070)	**0.173 (0.063)**	**0.176 (0.067)**
Identification X Behaviour Dummy	-0.076 (0.057)	0.087(0.053)	-0.071 (0.069)	-0.015 (0.062)	-0.011 (0.067)
Book X Identification X Behaviour Dummy	0.011 (0.082)	**-0.182 (0.075)**	-0.060 (0.098)	-0.050 (0.089)	-0.152 (0.095)
Random					
School	0.105 (0.009)	0.117 (0.009)	0.064 (0.006)	0.028 (0.003)	0.061 (0.006)
Pupil	0.397 (0.006)	0.329 (0.005)	0.825 (0.010)	0.703 (0.008)	0.768 (0.009)
% Variance associated with school					

Table 5 End of Key Stage 1 and Year 2 Behaviour outcomes for children with high behaviour scores

	End KS1 Mathematics	End KS1 Reading	Year 2 Behaviour
Fixed			
Cons	**0.101 (0.016)**	**-0.100 (0.015)**	**0.436 (0.028)**
End of Reception Total Score	**0.711 (0.006)**	**0.735 (0.006)**	
Sex	**-0.216 (0.011)**	**0.114 (0.011)**	**-0.295(0.023)**
Behaviour Dummy	**-0.243 (0.035)**	**-0.158 (0.036)**	1.354 (0.080)
Book X Behaviour Dummy	0.043 (0.050)	0.002 (0.052)	**-0.262 (0.110)**
Identification X Behaviour Dummy	0.044 (0.049)	0.083 (0.051)	0.053 (0.111)
Book X Identification X Behaviour Dummy	**-0.160 (0.071)**	**-0.200 (0.074)**	-0.236 (0.153)
Random			
School	0.104 (0.007)	0.087 (0.006)	0.142 (0.016)
Pupil	0.418 (0.005)	0.412 (0.005)	0.998 (0.016)
% Variance associated with school	19	21	12

The tables indicated three statistically significant main effects all of which were associated with the information booklet. Two were related to attitudes (to reading and school) and for those the Effect Sizes (see Tymms, in press) were 0.17 standard deviation units. It is worth noting that the assignment of the booklet linked to the third attitude measure (mathematics) almost reached statistical significance at the 5% level The third significant result showed that the Year 2 behaviour scores dropped by almost 0.3 of a standard deviation. That is, there was a positive effect on the Year 2

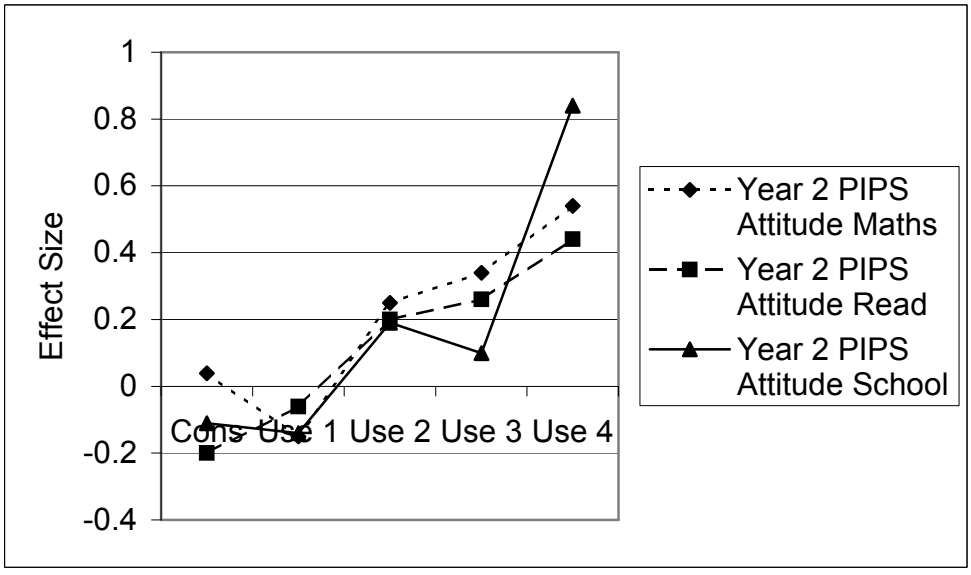
behaviour of pupils in schools that had been assigned an Information Book nearly two years earlier.

There were three significant interactions, all of which were negative. The first related to the PIPS Year 2 Reading outcome (0.18 standard deviations), the second to the end of Key Stage 1 reading (0.16 standard deviations) and the third to the end of Key Stage 1 mathematics (0.20 standard deviations). The Information Book gave the teachers general ways of working with children's behavioral difficulties that were found to be beneficial. Before children are formally identified, teachers might still regard their behavioural problems as a sign of immaturity or a clash of personalities between pupil and teacher, but when the children are labeled, the teachers might shift their viewpoint and try only to contain the situation - they might not really push the children to attain but simply keep them happy - in colloquial terms they 'write them off'. So why does identification alone not have a significant negative impact? Perhaps when teachers use the booklet it focuses their attention and keeps the labeled children in mind. Only by identifying pupils with high behaviour scores AND using the Information Book do the negative outcomes follow, and this interaction requires further investigation in the future.

Was There Evidence That Greater Use Of The Information Books Was Associated With Positive Outcomes?

One of the questions on the Teacher Quality of Life questionnaire asked teachers how often they had used the information book. About 18% of those who returned questionnaires and had been sent information books responded that they had used them (176 schools out of 983). The estimated amount of use was classified into five categories ranging from no use (Use 1) to very regular use (Use 4). Multi level models were used for the analysis. None of the coefficients were significant, presumably because there were very few teachers in some of the categories. There was a general improvement in PIPS Year 2 attainment and attitudes with increasing book use but no parallel improvement in Year 2 behaviour was seen. Figure 1 shows the increasing positive attitudes that were found to be associated with the more frequent use of the information book.

Figure 1 PIPS Year 2 Attitudes



The results described above were calculated from the whole sample. There were too few pupils and too few schools in each book use category with high behaviour scores to conduct a meaningful analysis.

It was thought possible that those who reported using the books might have a greater proportion of pupils in the class with high behaviour scores but that was not supported when One-way ANOVA was used to compare the average end of reception behaviour rating scale score of pupils in schools and the reported book use.

The analysis was based on the questionnaire sent to Year 2 teachers. It should be remembered that the Year 1 teachers of the cohort in question could have used the Information Book as well. Use of the Information Book over the two years would have an impact on the academic, attitude and behaviour outcomes in Year 2 and yet not be apparent from the analysis of the Year 2 teachers' reported use of the Information Book.

Interventions and Teachers' Quality of Life

Teachers in Intervention Groups 1 and 3 were generally more positive about their perceptions of work and the behaviour of pupils in their class. For a more detailed account of that analysis, see Tymms and Merrell (2003).

The four questions relating to the quality of their teaching life (stress, enjoyment, on top of things, and class behaviour) were combined to form a single scale (Chronbach's alpha= 0.67). The results were analysed in relation to the interventions using two-way ANOVA. After controlling for behaviour at the end of reception and school size, a significant ($p<0.05$) positive main effect relating to the booklets was found (Effect Size = 0.14). A relationship between year group size and teachers' quality of life would be expected, particularly if some of the children in a larger year group have behavioural problems. The results found here confirm that view.

The other main effect and the interaction were not significant.

Actions Taken By Teachers, Head Teachers and LEA Personnel

LEA Personnel
The number of responses (15 respondents from 13 of the participating LEAs) were not sufficient to analyse statistically however there were some points of interest. The majority of responders answered 'yes' to questions 1 – 5. Eight respondents said that neither their LEA nor the schools in their LEA used the Information Books from this study. Interestingly three of those individuals were from LEAs in Intervention Group 1. Four of the five individuals that said their LEAs/schools did use the Information Book were also from Intervention group 1.
Additionally:

- After the conference for LEA Intervention Group 1, one of the LEAs requested copies of the information book for each of their advisers.
- Three of the LEAs in LEA Intervention Group 1 and one LEA from Intervention Group 2 requested lists of schools assigned to each School Intervention Group for their district.

Head Teachers
No significant differences were found between intervention groups for questions 1, 2 and 3 of the School Level Questionnaire.

Significantly more head teachers (84% compared with 77%) from schools that received the Information Book and/or the identification of children with high behaviour scores reported that their school worked in partnership with other services (e.g. health, social) to provide help for children with severe ADHD symptoms. It seemed that the interventions had raised their awareness of children's behavioural problems.

Teachers
On the Pupil Level Questionnaire, the Year 2 teachers were asked to describe specific actions taken to help teach or manage the behaviour of children with severe ADHD symptoms. These were coded into three broad groups:

- Helping the child with set tasks in the classroom/school.
- Encouraging better behaviour in the classroom/school.
- Other actions (child repeats a year of school, liaison with parents, involvement with outside agency).

No significant differences between intervention groups were found.

Teachers were also asked to report which pupils had been prescribed medication for ADHD symptoms. Only 77 pupils were identified (0.3% of the sample), and there was no significant difference between intervention groups.

Economic Significance

A further consideration when evaluating the impact of an intervention is the size of the effect it brings about given the cost of its implementation. Leech and Onwuegbuzie (2003) defined that as 'Economic Significance'. They reasoned that a low cost intervention which results in a small positive effect might prove to be more cost effective than an expensive intervention that results in a larger effect and therefore it is important to consider the two factors together.

Clearly there is no benefit if there is no detectable gain and this section focuses on the use of the Information Book which had a positive impact on children's attitudes and behaviour as well on teachers' Quality of Life.

The Information Book cost £2.55 and the formula given by Leech and Onwuegbuzie for the Cost per level of Effectiveness Economic Significance Indicator (CE ESI) is the Cost divided by the Effect Size. If we consider an LEA with say 80 schools the cost for two books per school would be £408. This indicates that the CE ESI for an improvement in pupils' attitudes to reading and school would be about £2400 per LEA. The CE ESI for an improvement in Y2 behaviour of children with ADHD symptoms would be £1569. These figures may be compared with other interventions such as the national literacy strategy or in-service training for example which has costs starting in the 5 figure range and going up to millions of pounds. Unfortunately the authors know of no comparative data but LEAs may be able to compare this with training programmes that they implement and make appropriate judgements.

Summary of Results

Whole sample

- Pupils from schools that received the Information Book and where pupils with high behaviour scores were identified had significantly higher PIPS Year 2

Reading scores than the pupils in the other intervention groups. The Effect Size was 0.15.

- The teachers in schools that were sent information books had significantly more positive scores on the Teacher Quality of Life scale. The Effect Size was 0.14 for the whole sample.
- Seven percent more Head teachers from schools that had received the booklet or lists of named pupils or both reported that they worked in partnership with other services that provide help for children with severe ADHD symptoms compared with Head teachers from the Control Group. This was statistically significant.
- A positive association was found between the frequency of use of the information book by Year 2 teachers and an improvement in the PIPS Year 2 mathematics scores and attitudes of pupils was found. This did not reach statistical significance.

Children with high scores on the behaviour rating scale

- Pupils in schools that received the Information Book had significantly more positive attitudes towards school and towards reading. Effect Sizes were 0.17. The attitude to mathematics was approaching significance.
- The Year 2 behaviour of pupils in schools that received the Information Book was significantly improved (Effect Size = 0.26).
- Although identifying children with high behaviour scores did not have a significant effect in itself, significant negative interactions between the Information Book and Pupil Identification were found for the End of KS1 reading and mathematics scores. The Effect Sizes were in the range between –0.16 and –0.2.

Conclusions and Recommendations

There has been a considerable amount of research into behavioural and medical interventions aimed at helping children who are severely inattentive, hyperactive and impulsive but despite the volume of published work in this area there is a lack of longitudinal studies and well-designed interventions of direct relevance to the classroom.

The effect of identifying children with severe inattention, hyperactivity and impulsivity at such a young age and as such ‘labelling’ them is an issue. There are arguments for both identification and non-identification. Identification can lead to effective communication between parents, schools and external agencies to provide appropriate resources and support for a child. Conversely, some argue that identification gives a child a ‘label’ that causes others to automatically perceive them in a negative way, which may be detrimental to their progress and development. The results from this study did not support the argument that simply labelling children causes harm but there was evidence that labelling in combination with advice on what action to take did harm.

Clear advice to teachers is cheap to implement and significant positive associations between information books and outcomes of attitude and behaviour were found. It also had a positive impact on teachers’ perceptions of their own work if they worked in classes with more than 25 pupils. However, the proportion of Year 2 teachers who reported using the Information Books frequently was small and future research should therefore focus on methods of supporting teachers in their implementation of the strategies suggested in the information book.

More research is also needed into the ways in which early identification can be used in such ways as to have a positive impact.
The research has generated a cheap and effective intervention to help pupils and teachers in situations where there are issues to do with inattention, hyperactivity and impulsiveness in the first years of schooling.

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Appendix

End of Reception Behaviour Rating Scale

Score 1 mark for each statement which has generally applied to the child during their time in your class. Consider a criterion met only if the behaviour has persisted for at least six months and is considerably more frequent than that of most other children of the same gender and developmental level.

Inattention

1 Makes careless mistakes in school work or other activities.
2 Has difficulty sustaining attention in tasks or play activities.
3 Does not seem to listen when spoken to directly.
4 Does not follow through instructions, fails to finish work.
5 Has difficulty organising tasks and activities.
6 Is reluctant to engage in tasks which require sustained mental activity.
7 Loses equipment necessary for activity e.g. pencils, books.
8 Is distracted by extraneous stimuli.
9 Forgetful in daily activities.

Hyperactivity

10 Fidgets with hands or feet or squirms in seat.
11 Leaves seat in classroom or in other situations where remaining seated is expected.
12 Often runs about excessively in situations in which it is inappropriate.
13 Has difficulty in playing quietly.
14 Is often 'on the go' as if driven by a motor.
15 Talks excessively.

Impulsivity

16 Blurts out answers before questions have been completed.
17 Has difficulty awaiting turn.
18 Interrupts or intrudes on others e.g. pushes into conversations or games.

Re-assessment of Behaviour and Medication Summary

Sent to Year 2 teachers for the re-assessment of behaviour, medication summary and pupil level interventions.

How to fill in the Year 2 Pupil Sheet:
The sheet is very easy to complete and much of it will be blank when you have finished!
If a child has left the school cross out their name.
Write the initials of the current Year 2 teacher next to each child.
If any child is inattentive, hyperactive and/or impulsive, write a score of 1 (mild problems), 2 (moderate problems) or 3 (severe problems) in the boxes as appropriate. Otherwise leave these boxes blank.
If a child has received medication for the treatment of Attention Deficit Hyperactivity Disorder (ADHD), tick the 'Medication' box.
Briefly describe any interventions that have been used regularly to help any child with behavioural problems.
If you have time to supply any additional information in relation to any interventions that you have used and their success with particular children, please comment on a separate sheet.

School							
Pupil First Name	**Pupil Last Name**	**Y2 Teacher Name**	**Inattentive**	**Hyperactive**	**Impulsive**	**Medication**	**Interventions**

School Level Questionnaire

Sent to Head teachers to collect information about school level interventions.

	Yes	No
1. Does your school have information and resource packs for teachers with advice to help them work with children who are severely inattentive and/or hyperactive/impulsive?		
2. Does your LEA offer support and resources to help you work with children who are severely inattentive and/or hyperactive/impulsive?		
3. Do you have a whole-school policy for identifying and obtaining specialist help for children who are severely inattentive, hyperactive and/or impulsive?		
4. Does your school work in partnership with other services (e.g. health, social) to provide help for children who are severely inattentive and/or hyperactive/impulsive both in school and out?		
5. Have you used the booklet "Working with difficult children in Years 1 and 2: A guide for Teachers"?		

We would be grateful for any additional information in relation to the above questions. Please comment overleaf or on a separate sheet if you wish.

LEA Level Questionnaire

Sent to LEA personnel to collect information about LEA level interventions.

	Yes	No
1. Does your LEA directly help schools with the identification of children who have Attention Deficit Hyperactivity Disorder (ADHD)?		
2. Does your LEA distribute information and resource packs to teachers with advice to help them teach and manage the behaviour of children with ADHD or who are severely inattentive and/or hyperactive/impulsive?		
3. Does your LEA offer support and resources to help schools teach and manage the behaviour of children who are severely inattentive and/or hyperactive/impulsive?		
4. Does your LEA work in partnership with other services (e.g. health, social) to provide help for children with ADHD or who are severely inattentive and/or hyperactive/impulsive both in school and out?		
5. Does your LEA have any special provision outside mainstream classrooms for children with ADHD or who are severely inattentive and/or hyperactive/impulsive?		
6. Has your LEA or the schools in your LEA used the booklets “Inattentive, Hyperactive And Impulsive Children: Teaching And Classroom Management Strategies” or “Working with difficult children in Years 1 and 2: A guide for Teachers”?		

We would be grateful for any additional information in relation to the above questions. Please comment overleaf or on a separate sheet if you wish.

Teacher Quality Of Life Questionnaire

Sent to Year 2 teachers.

Your answers will be treated confidentially. However, for this research project we would like to analyse your responses in relation to the behaviour of the pupils in your class and therefore we need to know your name. Please return in the postage-paid envelope when completed.

For the questions below, put a cross in the box at the position that corresponds to your strength of feeling.

Example – Your feelings about falling into icy water:

Great | X | Awful

Your perception of work:

Relaxing | | Stressful

Enjoyable | | Unpleasant

On top of things | | Overwhelmed

The behaviour of the pupils in your class:

No problems | | Challenging

Support for helping you to deal with severely inattentive and or hyperactive/impulsive children:

Lots | | None

Resources in school for helping you to teach and manage severely inattentive and or hyperactive/impulsive children:

Lots | | None

Useful | | Waste of time

Have you used the booklet "Working with difficult children in Years 1 and 2: A guide for Teachers"?

Regularly | | Never