**Understanding 'what works:' a mixed-methods evaluation of a multicomponent reading intervention in primary schools.**

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**Abstract**

*Aims*: This research investigates the effectiveness of a multicomponent reading intervention using both quantitative and qualitative data.

*Method/Rationale*: This study evaluates how Educational Psychologists (EPs) can address literacy difficulties through exosystemic interventions that support school practitioners. A mixed-methods approach assessed a multicomponent reading intervention with Year Two children (N=58, mean age: 6 years, 8 months) through reading measures and interviews with five intervention practitioners. Pre- and post-intervention reading assessments were analysed quantitatively, while reflexive thematic analysis examined qualitative data from staff, providing insights into factors influencing intervention delivery and effectiveness from practitioner perspectives.

*Findings*: The intervention produced statistically significant improvements in word reading. Qualitative analysis identified four themes influencing successful implementation: (i) psychosocial interactive learning processes, (ii) enhanced self-determination of intervention facilitators, (iii) integrated approaches to teaching literacy, and (iv) structural integration of reading processes. These findings are contextualised within national education policy and highlight implications for EPs' strategic role in addressing literacy difficulties.

*Limitations*: This was a small-scale study and intervention fidelity was, to some extent, challenging given that practitioners were responsible for delivery.

*Conclusions*: This research provides valuable insights into the impact and effectiveness of a multicomponent reading intervention from both quantitative and qualitative perspectives,

demonstrating how EPs can lead development, support implementation, and evaluate interventions to address reading difficulties comprehensively.

## Introduction

Reading plays a fundamental role in education. Acquiring reading skills involves complex processes (Scarborough, 2001), complicating literacy development research. The contentious "reading wars" (Castles et al., 2018) contrast systematic phonics-led approaches emphasising explicit letter-sound instruction against whole-language approaches prioritising organic word and meaning discovery (Castles et al., 2018; Wyse & Bradbury, 2022). This study investigates an intervention for struggling readers while exploring facilitator perspectives on implementation factors contributing to intervention effectiveness.

## Literature review

### *UK reading policy*

Systematic synthetic phonics (SSP) has dominated the teaching of reading in the UK since the Rose Review (Rose, 2006), with its use reinforced by an Ofsted report on the practice of twelve "outstanding" schools (Ofsted, 2010). In 2021, the UK government mandated that all schools use a validated phonics programme adhering to SSP principles (Department for Education [DfE], 2021). Ofsted's evaluation criteria for school performance now include expectations that schools teach SSP from the beginning of Reception (Ofsted, 2022), further establishing SSP as the dominant approach to teaching word reading.

The government's stance on phonics is unambiguous, with teachers and parents understanding that children will undergo statutory testing at the end of Year 1 (aged 5-6; DfE, 2022). The Phonics Screening Check (PSC) aims to identify children who have learned to 'read' to an appropriate standard and those requiring additional support (DfE, 2022). The test design

necessitates the use of phonic strategies, as half of the words are pseudowords, requiring children to rely on grapheme-phoneme correspondence (GPC) to decode successfully and reach the required threshold. Despite the focus on teaching phonics in primary schools, national data for England show that a significant number of children are either disapplied (meaning they are unable to sit the test) or fail the test. For the academic year 2022-23, 18% of children failed the PSC. Boys were disproportionately worse off with just 76% passing the PSC compared to 82% of girls (DfE, 2023). Given these statistics, an exploration of how to support the children that do not meet these targets is warranted.

*Reviewing the evidence: phonics*

SSP approaches aim to teach the relationship between written letters (graphemes) and sounds (phonemes), emphasising decoding through sounding out and blending. Torgerson et al. (2006) suggested that phonics teaching enables better reading progress compared to either no phonics, or analytic phonics, and that decoding emphasis leads to better progress than whole language approaches. The Education Endowment Foundation (EEF; 2022a) synthesised 121 studies, concluding that SSP has a high impact for a low cost, equating to an average of five additional months' progress per year. Evidence from the National Reading Panel's meta-analysis indicate that systematic phonics instruction broadly supports children to learn to read (Ehri et al., 2001) and Bowers (2020) notes a general consensus that phonics instruction is more effective than other approaches. McArthur et al. (2018) reported that phonics training is effective for improving literacy-related skills, including reading fluency, in a further meta-analysis.

The EEF (2022a) conducted an efficacy trial of two reading programmes guided by SSP in 131 UK schools. Notable findings suggest that phonic interventions have different outcomes at different ages. Children receiving Read Write Inc. (RWI), an early phonics programme, made

one month's additional reading progress compared to peers, while those receiving Fresh Start, a "catch-up" SSP programme for Years 5 and 6, made two months less progress. The trial had both implementation and fidelity issues, and additional reading outcome measures had low to moderate security ratings. However, the findings suggest that the use of 'Fresh Start' remedial phonics with older primary pupils, who have already received phonics instruction, leads to worse outcomes in national reading and writing tests (EEF, 2022b). Flynn et al. (2012) reported that effects of reading interventions, such as phonics teaching, contributed to reading growth in early elementary years but these effects were smaller for older pupils. This highlights a critical gap that creative alternative solutions may fill.

*Reviewing the evidence: alternative approaches*

Multicomponent reading interventions, drawing on various theoretical principles, have shown promise in supporting struggling readers. Toste et al. (2017) investigated the efficacy of a multimodal intervention combining multisyllabic word reading and motivational beliefs training in a randomised controlled trial (RCT) with 59 third and fourth graders (ages 8-10). Results indicated positive effects of both components, with the motivational beliefs training group outperforming the other groups. These findings were replicated in a larger study (Toste et al., 2019), providing strong support for the approach. However, the mechanism by which motivational beliefs training supported reading development in this study remains unclear (see McBreen & Savage, 2021).

Wanzek et al. (2017) examined the effectiveness of 'Passport to Literacy,' a widely used multicomponent intervention in the USA, with 451 Grade 4 students (ages 9-10). The programme, designed for one school year, targets phonics, word recognition, fluency, vocabulary, and comprehension using metacognitive strategies. Significant improvements were observed in reading comprehension but not word reading. In a follow-up study, Wanzek et al.

(2020) investigated the 'Voyager Passport' programme with 306 Grade 4 pupils. The intervention focused on word recognition and text comprehension strategies, including vocabulary instruction. Significant gains were reported in word reading and fluency, with high fidelity delivery. However, the impact on language comprehension was not measured, limiting insights into the intervention's mechanisms.

The literature suggests that multicomponent interventions (e.g., incorporating wider aspects of reading, writing and motivation) may prove promising for supporting children with literacy difficulties, particularly older learners. In a meta-analysis, Al Otaiba et al (2023) argue for multicomponent interventions that combine teaching code (phonics) and meaning, as well as integrating reading and writing. Evidence from meta-analyses provides a powerful argument that reading interventions should address “multiple aspects of foundational reading” (Gersten et al., 2020, p.418). Donegan and Wanzek (2021) share this view, adding from their own meta-analysis that interventions which were multicomponent in their approach predicted significant effects on standardised measures of reading. Authors added that interventions in smaller groups were associated with larger effect sizes. As such, evidence from the literature and drawing on reading theory would suggest that the content of a successful reading intervention should be multicomponent in nature. There is a clear rationale for content being carefully selected and that in order to support generalisation, the intervention materials should be judiciously selected to reflect real world literature (Solity & Vousden, 2009) and delivered in smaller groups.

*The role of the Educational Psychologist (EP) in the UK*

EPs work to address a wide range of pupil needs across multiple levels of their ecosystem (Hill, 2013), with core EP practices including consultation, research, assessment, intervention, and training (Cameron, 2006). The SEND Code of Practice (DfE, 2015) has both shaped EP practice and protected the profession's status (Buck, 2015), with EPs having a

statutory role in Education, Health and Care Plan (EHCP) needs assessments, with this potentially impacting perceptions of the primary duty of EPs being one of assessment, resource provision and labelling (Buck, 2015). However, more recent academic discourse advocates a boarder role for EPs in developing, implementing and evaluating interventions to support pupils to develop literacy skills and for early intervention to reduce the number of pupil's whose literacy needs escalate to the level requiring an EHCP (Hill et al., 2023; Stanbridge et al., 2023).

Current conceptualisations of reading difficulties are moving away from discrepancy models toward more integrated approaches. Aaron et al. (2008) advocate for a component model of reading (CMR) that better informs intervention strategies rather than merely categorising poor readers. This shift addresses concerns about the problematic nature of labelling in reading difficulties (Gibbs & Elliot, 2020) and its potential impact on self-esteem (Taylor et al., 2010). Recent evidence suggests a convergence in understanding literacy difficulties. Hill et al. (2023) report a broad consensus that readers with dyslexia cannot be operationally differentiated from those with general literacy difficulties, nor do they require distinct intervention approaches. This perspective calls for more equitable, systemic responses to literacy difficulties, emphasising timely support for all struggling readers. Extending this position, Stanbridge et al. (2023) propose a paradigm shift in EP practice—moving from individual need identification toward implementing comprehensive frameworks that address literacy difficulties equitably and enable early identification of children requiring support interventions which may need to go beyond universal phonics approaches.

*The strategic role of EPs in supporting reading difficulties in schools*

Recent small-scale studies illuminate EPs' practical role in reading intervention implementation. O'Connor and Solity (2020) documented reading progress across standardised measures for three children participating in an EP-facilitated intervention based on instructional

psychology and the 'simplicity principle.' Similarly, Dunford and Hill (2023) reported reading improvements among five EAL children following an EP-facilitated intervention using direct instruction and visual methodologies. Both studies emphasised 'real' books containing realistic representations of high-frequency words (Solity & Vousden, 2009; Vousden et al., 2011), reinforcing the potential for EP-designed interventions to address literacy needs.

Based on the reviewed literature, there is clear evidence that suggests that a number of children still struggle to learn how to read. Evidence is emerging that a multicomponent intervention may be a useful approach for a slightly older learner. Little is known about how the practitioner perceives the multicomponent intervention. The focus of the present study was administering an intervention and importantly considering how such an intervention can be implemented successfully providing insight into the role of the EP in facilitating such interventions.

The present study had the following research questions and hypothesis:

1. To what extent does a multicomponent reading intervention impact the reading ability of 6–7-year-olds, as measured by standardised measures of word reading?
    a. *It was hypothesised that a multicomponent reading intervention would significantly improve the reading ability of 6–7-year-olds, as evidenced by higher scores on standardised measures of word reading compared to a control group receiving standard reading instruction.*
2. What are the views of the practitioners who acted as facilitators or who were involved in the organisation and delivery of the intervention?

## Methods

### *Design*

This study employed an embedded mixed-methods matched pairs crossover design. It represents a small-scale feasibility evaluation incorporating practitioner voices to understand factors supporting effective delivery in school settings. School staff identified children with lowest reading attainment scores for participation. The intervention group received the 10-week intervention during Spring term while the wait-list control received standard teaching. Data collection occurred at baseline (t1), after the intervention group completed the programme (t2), and after the wait-list control received the intervention during Summer term (t3). The study comprised two reporting components: Part 1 examining reading outcomes and Part 2 analysing facilitator perspectives. From 58 initially recruited children, 55 completed the study. Facilitator interviews occurred within two weeks following t3 data collection through semi-structured interviews, recorded and transcribed by the first author.

***Participants***

For part 1 of the study, 55 Year 2 children (*M* age at baseline: 6 years, 8 months) from 5 schools in the south of England formed the participants. Twenty-five of the participants were female (45%) and 29 of the children (53%) were registered as having English as an additional language (EAL). Participants were organised into two groups at the school level (the intervention group and the wait-list control). The groups were matched initially based on their standardised scores from the single word reading scale (British Ability Scales [BAS-3]; Elliot & Smith, 2011b). Matching individuals then formed two groups that were also matched to ensure that there was an even split of individuals for whom English was an additional language. For part 2, the facilitators of the intervention ($n$= 5), all of whom were female and teaching assistants or learning support assistants, took part in a semi-structured interview. The participants represented each of the schools that took part in the study.

***Measures***

For part 1 of the study, single-word reading was assessed at all three time points using the *BAS3 Word Reading sub-test* (Elliot & Smith, 2011b) which is an individually administered norm-referenced standardised measure suitable for children aged 6-17 years. The test requires individuals to read words increasing in difficulty until a stopping point is reached. Raw scores are converted to ability scores. Single-word reading has a reliability of 0.98 (Elliot & Smith, 2011a).

For part 2 of the study, an interview schedule was developed to elicit views of the facilitators with reference to the effectiveness of the intervention, the strengths of the intervention, any potential barriers or weaknesses in the intervention and general reflections having delivered the intervention. Interviews lasted between 24 and 33 minutes.

***Procedure***

The intervention was named 'We Are Readers' with the objective of reinforcing reading related self-image. It was designed to be delivered daily to a small group (6-8 children) for thirty minutes over a course of 10 weeks. On average, facilitators delivered 33.2 sessions. Facilitators were trained on the delivery of the intervention by an EP and received ongoing supervision from an EP throughout the delivery of the intervention. In total, the facilitators received 8 hours of instruction each about the delivery of the intervention (3 hours of initial training face-to-face + 30 minutes online supervision every other week). The intervention followed a highly structured format which was repetitive in nature. The structure of an intervention session is outlined in Table 1.

Table 1. Intervention structure

| | Time (min) |
|---|---|
| 1. Welcome and reminder of the intervention structure | 1 min |
| 2. Motivational beliefs statement | 2 minutes |
| 3. Instruction of commonly occurring digraphs (new digraph presented daily) | 4 minutes |
| 4. Reading words containing target digraph | 4 minutes |
| 5. Introduction of commonly occurring words (interleaved, 2 new words daily) | 5 minutes |
| 6.Definition of the newly learned words | 5 minutes |
| 7. Application – reading 'real' books | 10 minutes |

The intervention integrated principles from instructional psychology, cognitive load theory, and reading development models. Specifically, the approach prioritised carefully targeted content delivery (Chen & Savage, 2016), visual word recognition methods (Frith, 1985; Coltheart et al., 2001), authentic reading materials (Solity & Vousden, 2009), and positive self-esteem reinforcement (Boyes et al., 2018; Riddick et al., 1999; Wilmot et al., 2023), while employing structured, repetitive instruction with explicit skill generalisation techniques (Ward et al., 2017; Haring & Eaton, 1978; Topping, 1987; Plass et al., 2010).

***Data analysis***

To answer research question 1, a two-way repeated measures analysis of variance (ANOVA) was performed on the BAS3 word reading subtest. Assumptions of the analyses were checked including tests of normality of distribution. To check for differences between scores at *t*1, *t*2, and *t*3, and between groups, post-hoc pairwise analyses were performed on the ability scores. Analysis of the qualitative data was performed using reflexive thematic analysis (TA; Braun & Clarke, 2006, 2019, 2021). The approach adopted was inductive since there was no theoretical framework that would have been appropriately applied and latent as opposed to semantic in its level of analysis as the researcher was interested in the underlying psychological processes being communicated. The qualitative analysis adopted a reflexive stance (Patnaik,

2013), acknowledging the researcher's role in interpretation while maintaining methodological rigor through systematic thematic analysis procedures (Miles & Huberman, 1994).

### *Ethical considerations*

This study was conducted in line with the British Psychological Society (BPS, 2018) Guidelines for Research Projects. In addition, ethical approval was granted from two ethics reviewers on behalf of [anonymised for review]. Parents provided written informed consent for their child to participate, and participant assent was sought through the use of child-friendly materials. School staff who took part in the interview phase were given an information sheet and provided written informed consent to take part. Participants were informed that their data would be anonymised and they were able to opt out at any stage of the study.

## Results

### *Quantitative data analysis*

For the BAS3 word reading subtest, a two-way (Group: Intervention vs. Waitlist control x Time: *t*1 vs. *t*2 vs. *t*3) repeated measures ANOVA was performed on ability scores. Mauchly's test indicated that the assumption of sphericity had been violated (p =.015), and therefore degrees of freedom were corrected using Huynh-Feldt estimates of sphericity, $\varepsilon$=.91 (Greenhouse-Geisser $\varepsilon$>.75). The ANOVA on ability scores on the BAS3 word reading subtest revealed that there was a significant main effect of group, $F(1, 47) = 5.713$, $p$=.021, $\eta_p^2$ =.11, a significant main effect of time, $F(1.8, 86.1) = 245.56$, $p$<.001, $\eta_p^2$ =.84, and a significant interaction of group and time, $F(1.8, 86.1) = 32.74$, $p$<.001, $\eta_p^2$ =.41. The estimated marginal means are displayed in Figure 1.

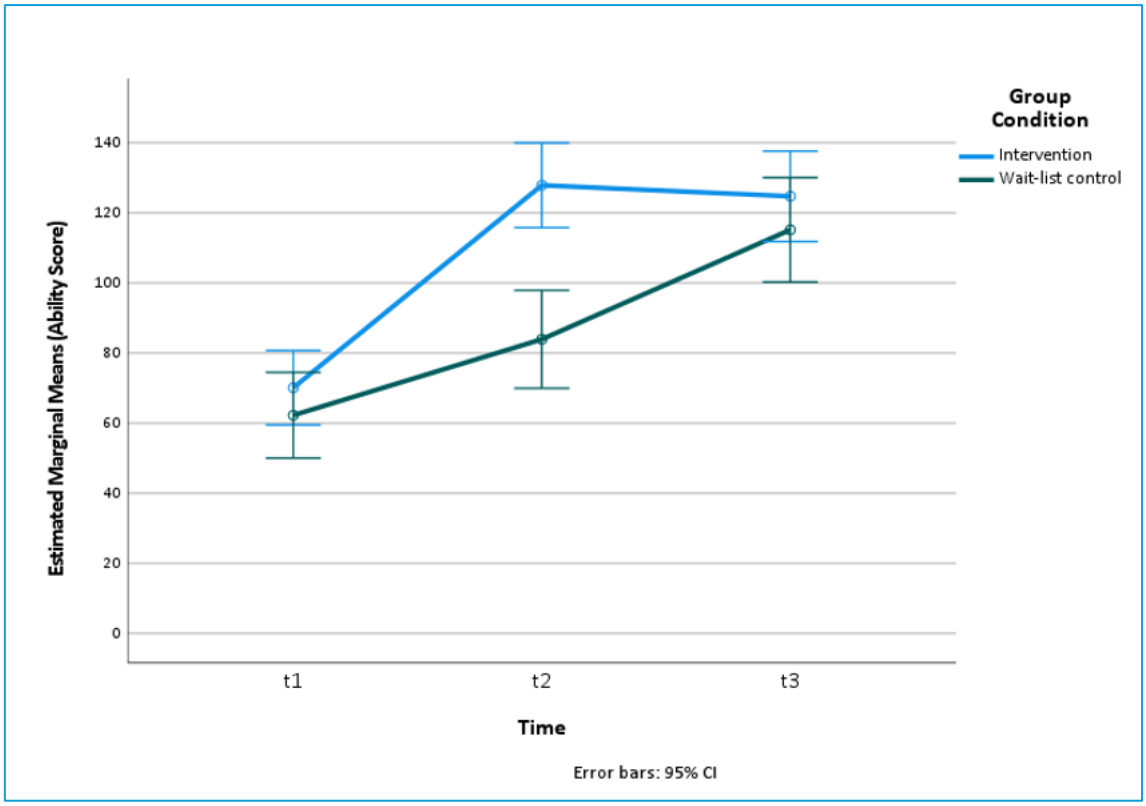


Figure 1. Split plot ANOVA displaying estimated marginal means for the BAS3 word reading ability scores.

Post-hoc pairwise comparisons are displayed in Table 2. The results show that there was a significant increase in word reading ability scores between *t*1 (*M*=71.2, *SD*=27.8) and *t*2 (*M*=128.1, *SD*=31.8) for the intervention group. The average score for this group was lower at *t*3 (*M*=125.5, *SD*=33.0) compared to *t*2, although this difference was not significant. The wait-list control scored significantly higher in word reading between *t*2 (*M*=83.9, *SD*=28.8) and *t*3 (*M*=115.1, *SD*=32.9) and also improved significantly between *t*1 (*M*=63.8, *SD*=26.4) and *t*2 when they were not receiving the intervention. The intervention group performed significantly better on word reading than the wait-list control at *t*2. Both groups scored significantly better at the end of the trial than before the trial began and there was no significant difference in the two groups scores at *t*3.

Table 2. Post-hoc comparison: condition*time (BAS3 Word Reading Ability Scores)

| | | Mean Difference | SE | t | Cohen's d | $p_{bonf}$ |
|---|---|---|---|---|---|---|
| Intervention, t1 | Wait-list control, t1 | 7.857 | 9.036 | 0.870 | 0.251 | 1.000 |
| | Intervention, t2 | -57.750 | 3.294 | -17.530 | -1.845 | < .001 *** |
| | Wait-list control, t2 | -13.810 | 9.036 | -1.528 | -0.441 | 1.000 |
| | Intervention, t3 | -54.607 | 3.294 | -16.576 | -1.744 | < .001 *** |
| | Wait-list control, t3 | -45.048 | 9.036 | -4.985 | -1.439 | < .001 *** |
| Wait-list, control, t1 | Intervention, t2 | -65.607 | 9.036 | -7.260 | -2.096 | < .001 *** |
| | Wait-list control, t2 | -21.667 | 3.804 | -5.696 | -0.692 | < .001 *** |
| | Intervention, t3 | -62.464 | 9.036 | -6.913 | -1.995 | < .001 *** |
| | Wait-list control, t3 | -52.905 | 3.804 | -13.908 | -1.690 | < .001 *** |
| Intervention, t2 | Wait-list control, t2 | 43.940 | 9.036 | 4.863 | 1.404 | < .001 *** |
| | Intervention, t3 | 3.143 | 3.294 | 0.954 | 0.100 | 1.000 |
| | Wait-list control, t3 | 12.702 | 9.036 | 1.406 | 0.406 | 1.000 |
| Wait-list control, t2 | Intervention, t3 | -40.798 | 9.036 | -4.515 | -1.303 | < .001 *** |
| | Wait-list control, t3 | -31.238 | 3.804 | -8.212 | -0.998 | < .001 *** |
| Intervention, t3 | Wait-list, control, t3 | 9.560 | 9.036 | 1.058 | 0.305 | 1.000 |

** $p < .01$, *** $p < .001$

*Note.* P-value adjusted for comparing a family of 15

### *Qualitative thematic analysis*

Qualitative data obtained during the interviews, collected after *t*3, with intervention facilitators were analysed using reflexive TA (Braun & Clarke, 2006, 2019, 2021). Four overarching themes were identified in the data: (i) structural integration of the reading processes, (ii) psychosocial interactive learning processes, (iii) increased self-determination of the facilitator and (iv) supported integrated approach to teaching literacy. A thematic map is represented in Figure 2. Each overarching theme and select subthemes will be discussed in the subsequent sections, with interview quotations embedded in the text that reflect the theme in discussion.

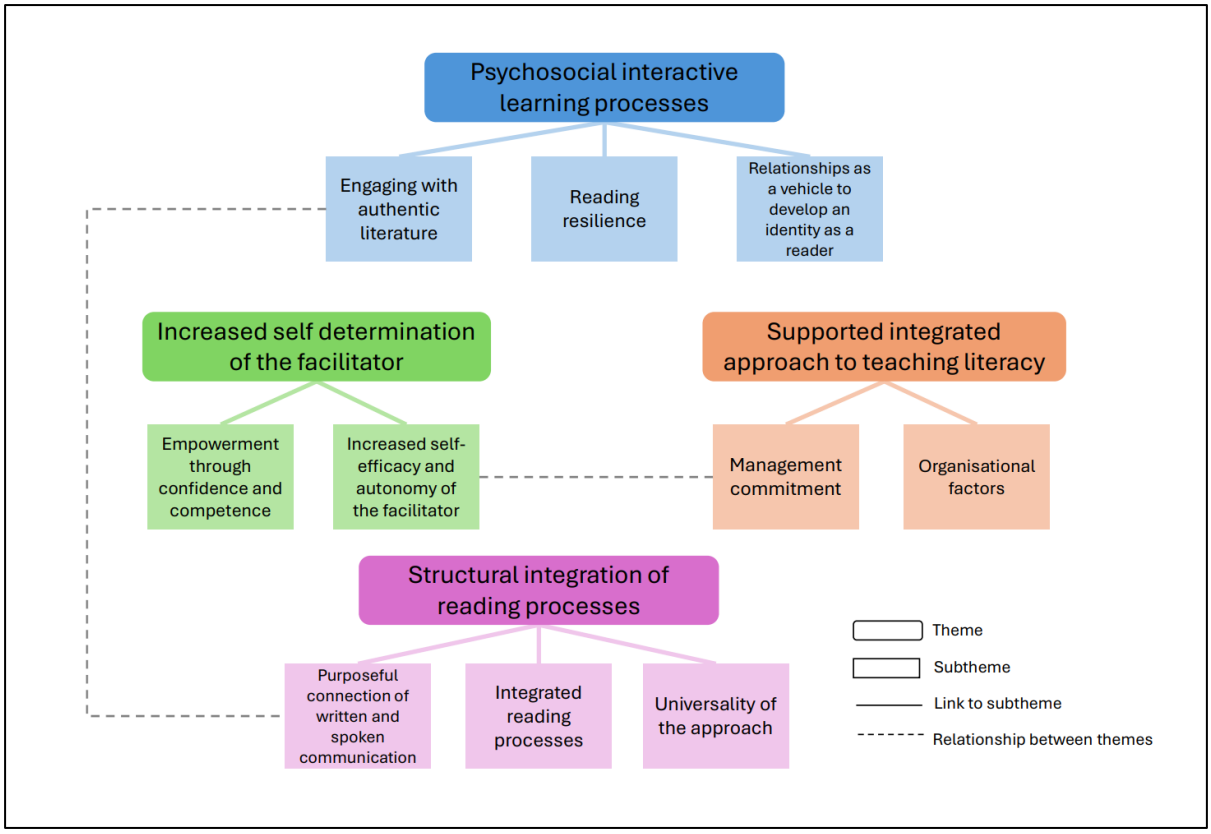


Figure 2. Thematic map depicting the four overarching themes and eleven corresponding subthemes

***Theme One: Psychosocial interactive learning processes***

Theme one explores reports around the psychosocial interactive learning processes associated with the intervention, with four subthemes, two of which are linked.

*Engaging with Authentic Literature*

Participants reflected on how the intervention's use of 'real' books successfully supported both engagement and reading enjoyment. One participant noted, *"...for one little girl who doesn't read at home...she can take her books and read them by herself... it opens a new world for them."* The authentic materials appeared to transform children's attitudes towards reading, with one participant observing, *"I have noticed actually from the not wanting to come and read, to wanting to come and read...to get that new book to let's ...read this one."*

Participants also mentioned that the approach provided time for children to absorb the meaning of the text, enhancing both engagement and comprehension through the holistic nature of the materials.

*Reading Resilience*

Interview data indicated that the intervention's content positively impacted children's reading resilience, with participants reflecting on increased self-esteem and confidence related to reading. All participants agreed that the inclusion of motivational statements or positive affirmations were helpful in achieving this. One participant observed, *"I found when we've been reading, as we have gone along…they're less likely to give up."*

*Relationships as a Vehicle to Develop an Identity as a Reader*

A clear theme emerged about the relationships that developed as a result of the intervention, both among the children and between the adult participants and the children, and how this helped shape and reinforce identity as a reader. One participant stated, *"...the kids loved it. I'd walk into their classroom… straightway jumping up, we are readers."* Participants discussed children's sense of benefitting from being in a space where the focus is on them, and their own sense of pride in being part of a group where they observed children making progress.

***Theme Two: Increased Self-Determination of the Facilitator***

Theme two explores information that emerged around the facilitator's increased self-determination as a result of delivering the intervention, with data centring around perceived self-efficacy and autonomy.

*Increased Self-Efficacy and Autonomy of the Facilitator*

All participants discussed psychological constructs of autonomy and self-efficacy, referring to an individual's belief in their ability to successfully complete a task or accomplish

a specific goal (Bandura & Walters, 1977). Participants expressed how easy they found the intervention to implement, with one stating, *"...it was easy, because everything's done for you. I didn't have to prep anything. It was all there."* Participants also communicated feelings of enjoyment related to the intervention, reflecting their confidence and independence in delivering the intervention.

*Empowerment Through Confidence and Competence*

Thematic analysis revealed that all adult participants discussed their growing sense of competence and confidence in applying and adapting the approach, referring to underlying pedagogical approaches informed by instructional psychology. While some comments reflected a lack of fidelity to the programme, they also indicated facilitators' confidence to adapt approaches. Participants also reflected on the usefulness of having the confidence to move away from phonics books, with one stating, *"...it's given me the confidence ...to come off the… more phonics-based books, and we've gone to… stories."*

Competence in the principles of the approach was reflected in quotes discussing interleaving, direct instruction, and the benefits of repetition. One participant noted, *"...that was really beneficial…each day…the fact that it was…repetitive, and the children knew what was going to come each session was really useful."*

***Theme Three: Supported Integrated Approach to Reading***

This theme explores subthemes centring around a supported integrated approach to reading, with intervention facilitators discussing management commitment and organisational factors.

*Management Commitment*

Four out of five participants emphasised the importance of all staff being informed about the intervention, regardless of their direct involvement, and the necessity of support from senior staff for successful delivery. Participants highlighted the significance of release time, supportive leadership, and effective communication between intervention staff and classroom teachers. One adult participant underscored the value of *"having that intervention teacher… actively encouraging them to do it within the lessons and ... making sure there's that communication between the teacher and the intervention staff."*

*Organisational Factors*

All participants discussed organisational factors influencing the implementation of the intervention, including environmental challenges such as access to appropriate equipment and adequate space for delivery. One participant noted, *"I mean, for us just finding a place with a screen to be able to show them was quite tricky."* Participants also identified the challenge of finding time to conduct the intervention without disrupting regular lessons, with one stating, *"it's getting that time, I don't want to pull them out of lessons…So it's really only… assembly times."*

***Theme Four: Structural Integration of Reading Processes***

This theme explores participants' views on the purposeful connection of written and spoken communication, integrated reading processes, and the universality of the approach.

*Purposeful Connection of Written and Spoken Communication*

Participants emphasised the importance of purposefully connecting written and spoken communication within the intervention. One participant noted the utility of children creating their own sentences to reinforce word meanings and expand vocabulary, stating, *"...I mean, some of them made up crazy sentences... there was quite a lot of discussion some days…on those sentences."* Participants also reflected on the exposure to new language through direct

instruction and expository texts, with one commenting, *"I love the idea that they are exposing [sic] to new language…new vocabulary. With the new book corner books that they haven't read before."* This suggests that exposure to unfamiliar language in texts reinforced higher-order reading skills, such as clarifying new words, distinguishing this intervention from SSP practice.

*Integrated Reading Processes*

Qualitative data revealed participants' perceptions of the intervention's impact on integrating reading processes and affecting reading outcomes. Participants observed improvements in fluency and reading levels, with one noting, *"they were just…steadily… reading… they all moved up a reading level."* Importantly, participants highlighted children's capacity to apply knowledge gained from the intervention to other aspects of the curriculum and school day, with one stating, *"So you're taking them from reading a book, to reading on the screen with me, too, then applying that knowledge and those words and then taking it into another level of the teaching and learning for them. And I think that's where you can see the progression."*

Participants critiqued the integration of SSP approaches, with one mentioning, *"...I do think the phonics element of it was a nice inclusion, but I don't know how beneficial that part was, I suppose because they were already learning phonics in school..."* Another participant elaborated, *"...I definitely think…some of those readers…benefit more from the sight reading, rather than the phonics based..."* This suggests that methods distinguishable from classroom instructional methods, particularly phonics, may be beneficial for some children.

*Universality of the Approach*

The final subtheme centred on participants' views regarding the universality of the approach, both in terms of individual responses to the intervention and the benefits of mixed-ability grouping. Participants noted that the groups tended to include more EAL children or

children with special educational needs. While some participants felt that mixed-ability grouping presented challenges, others believed it facilitated learning for all children, with one stating, *"sometimes some of the stronger ones, the other ones would sort of follow… they'd take the lead, and they just follow along, sort of, and copy them sort of thing."*

## Discussion

This study investigated whether a multicomponent reading intervention improved reading outcomes for children and sought to delve deeper into the effectiveness of the approach by collecting the views of the intervention facilitators, gaining an understanding of *why* the intervention was effective. The key findings will be discussed drawing on the data and exploring the implications for intervention and, importantly, for the role of the EP.

### *Reading outcomes*

Measures of word reading were obtained at *t*1, *t*2 and *t*3 using the BAS3 word reading subtest. These data indicated that participants improved significantly on a measure of single word reading following the intervention. There was a significant increase for both groups after they had received the intervention compared to their scores before. Additionally, the intervention group performed significantly better on this measure than the wait-list control at *t*2, indicating that it was the intervention itself that was successful in improving single word reading. Furthermore, at *t*3, the intervention group did not perform significantly lower than at *t*2, indicating the improvements observed following the intervention were retained over time and there was no learning decay.

This is consistent with previous research (O'Connor & Solity, 2020; Wanzek et al., 2020). This suggests that a multicomponent reading intervention improves word reading. This study adds to previous research (e.g., Wanzek et al., 2017) as it provides an insight into the positive long term effect of the intervention through collection of data at *t*3, which indicated

that participants retained their gains. While meta-analyses demonstrate the broad efficacy of systematic phonics instruction (Ehri et al., 2001), findings from this investigation suggest that multicomponent interventions, incorporating both targeted word recognition strategies and psychosocial elements, can effectively support children who do not adequately respond to phonics-first instruction.

***Qualitative analysis***

The qualitative data significantly extend the reading intervention literature, which typically relies exclusively on quantitative pre-post measures (Donegan et al., 2020; Vaughn et al., 2016; Wanzek et al., 2020). As Miciak et al. (2018) note, no 'silver bullet' exists in remedial reading programmes. Intervention research rarely addresses the critical factors underlying successful outcomes. This analysis of facilitator interviews provides valuable insights beyond effectiveness data, illuminating why the intervention succeeded and how EPs can develop interventions with implementation integrity—extending our understanding beyond outcome measures to implementation processes.

*Psychosocial Interactive Learning Processes*

The emergent thematic analysis reveals pivotal dimensions of psychosocial interactive learning processes within the reading intervention. The motivational architecture demonstrated significant potential for enhancing student engagement through contextually relevant literary materials (i.e., ‘real books’). This approach substantively diverges from traditional reading scheme methodologies, aligning with contemporary research on motivation-driven literacy interventions (Solity & Vousden, 2009; Daki & Savage, 2010).

The intervention's critical finding centred on reading resilience and self-efficacy mechanisms. Empirical evidence corroborates the complex interrelationship between reading difficulties and diminished self-esteem (Boyes et al., 2018; Taylor et al., 2010; Wilmot et al.,

2023). Qualitative data from participant interviews revealed consistent improvements in reading-related psychological constructs, specifically reading self-concept, self-efficacy, and domain-specific self-esteem, aligning with established research on the relationship between psychosocial factors and reading achievement outcomes (Vaughn et al., 2022; Miciak et al., 2018). Relational dynamics emerged as a significant mechanism facilitating reading identity development. This finding contributes a nuanced perspective to the extant literature, highlighting the mediating role of positive adult-student relationships in learning outcomes (Hughes et al., 2008).

*Increased Self-Determination of the Facilitator*

The analysis revealed significant insights into facilitator self-determination through the lens of Self-Determination Theory (SDT; Deci & Ryan, 2012). Existing literature predominantly focuses on intervention fidelity measurement (Wolgemuth et al., 2014), potentially overlooking the critical role of adult engagement in intervention effectiveness (Anderson, 1997). SDT's core constructs of autonomy, competence, and belongingness emerged as factors influencing intervention delivery.

The research findings illuminate nuanced dimensions of facilitator motivation. Participants demonstrated increased autonomy through management support, enhanced competence via comprehensive training and supervision, and a robust sense of belonging within a professionally recognised research cohort. This multifaceted approach to facilitator engagement potentially represents a significant methodological contribution to understanding effective intervention implementation. Participants additionally reported increased confidence and autonomy which may present potential challenges to standardised intervention implementation. The tensions between empowerment and methodological consistency warrant

further investigation, suggesting the need for sophisticated frameworks that balance facilitator agency with intervention integrity.

*Supported Integrated Approach to Teaching Reading*

The analysis revealed organisational factors influencing reading intervention implementation, with management commitment emerging as a central mechanism for facilitator empowerment. Participants described the necessity of strategic curricular integration, emphasising the importance of collaborative pedagogical approaches that challenge de-contextualised intervention models (Roberts et al., 2018). Organisational barriers represented a significant mediating factor, with institutional "buy-in" demonstrating adaptive strategies that circumvent environmental challenges and highlight the importance of systemic engagement in intervention delivery.

*Structural Integration of Reading Processes*

The analysis highlights the importance of structural integration in reading intervention, with particular emphasis on the purposeful connection between written and spoken communication. The 'word study' element aligned with the Dual Route Cascaded (DRC) model of reading (Coltheart et al., 2001), addressing linguistic disadvantages encountered by children from less language-rich backgrounds (Hart & Risley, 1995; Bernardi et al., 2023). Perfetti's Lexical Quality Hypothesis (Perfetti & Hart, 2002) further substantiates this approach, positing that comprehensive word knowledge—encompassing orthographic, phonological, and semantic representations—directly influences reading comprehension and fluency attainment. This approach demonstrates particular significance in navigating the morphophonemic nature of the English language (Rastle, 2019), providing a strategy for developing comprehensive word reading skills.

*Understanding Intervention Effectiveness: A Feasibility Perspective*

The study's methodological approach of integrating qualitative data collection enables a more granular exploration of intervention effectiveness beyond large-scale quantitative investigations. The multicomponent intervention's efficacy emerged from three principal factors. First, the design transcended the singular systematic synthetic phonics approach, activating a range of strategies to support those struggling with reading. Second, the intervention incorporated engaging, authentic literary materials that enhanced motivation and reading-related self-esteem. Third, the intervention's success critically depended on adult facilitator dynamics, emphasising the importance of stakeholder commitment and facilitator self-determination aligned with SDT constructs of autonomy, competence, and belongingness (Deci & Ryan, 2012). These findings suggest the necessity of holistic, contextually responsive intervention designs that address both learner and facilitator needs.

***Strengths and Limitations of the Study***

The research demonstrated notable methodological strengths through its mixed methods approach, which provided depth and breadth of findings by incorporating quantitative and qualitative data—a departure from existing literature. Despite methodological limitations including a small sample of five London schools and absence of formal power analysis, the study offers practical insights for EP practice. The research acknowledged inherent challenges in intervention fidelity, recognising that facilitator autonomy and contextual expertise may warrant more nuanced interpretations of programme implementation than traditional rigid adherence models. Critically, while psychometric test limitations were acknowledged, data triangulation from multiple sources mitigated potential construct validity concerns, providing a balanced and pragmatic approach to understanding intervention effectiveness.

***Implications of Research Findings***

This research provides evidence-based rationales for alternative reading interventions that challenge UK phonics-first policy while highlighting EPs' critical role in systemic literacy intervention support through training and supervision. The findings advocate for targeted intervention models prioritising facilitator self-determination, paving the way for the development of an Advanced Literacy Intervention Support Teaching (ALIST) role to enhance intervention effectiveness. Theoretically, this study proposes alternative literacy acquisition pathways beyond exclusive phonics instruction, with implications for developmental reading models and the DRC model (Coltheart et al., 2001).

### *Conclusion*

Multiple data sources revealed critical intervention success factors, including psychosocial interactive learning processes and facilitator self-determination. These findings hold substantive implications for EP practice, advocating for alternative intervention strategies emphasising motivational constructs and contextually relevant materials. The research underscores EPs' pivotal role in promoting evidence-based, psychologically informed literacy interventions addressing struggling readers' complex needs through preventative approaches that may reduce EHCP demand resulting from unmet literacy needs.

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