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Casualties in a game of hit and miss: Reading trajectories, identification of concerns and provision of support in the early years of schooling

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Linda Graham, Sonia White, Haley Tancredi and Pamela Snow summarise a recently published article (Graham et al., 2020) in which they explored teachers' concerns about children in their classes, and the corresponding supports provided to the children.

How should teachers respond when they are concerned about behaviour problems in the classroom? Could a test like the Phonics Screening check (<https://www.education.gov.au/year-1-phonics-check>) contribute to their decision-making? Misty Adoniou, writing for the Australian Association for Research in Education, has claimed that the Phonics Check “doesn’t tell teachers anything they didn’t know already... [or] what kind of instructional intervention their identified strugglers need.” (Adoniou, 2017, np <https://www.aare.edu.au/blog/?p=2533>). But Linda Graham and her colleagues provide evidence that teachers could indeed benefit from more support in identifying and supporting students with reading difficulties, and that a decoding assessment might play a critical role. If you want to know what wobble chairs have to do with the topic, read on ...

Study aims and background

For all children, learning to read is one of the most significant and fundamental achievements in their early school years. Reading competence is closely linked with increased academic outcomes, access to postsecondary education and training, and improved vocational opportunities (Castles et al., 2018). As some 5-10% of children will continue to experience literacy difficulties despite high-quality initial reading instruction (Partanen & Seigel, 2014), it is critical to identify those children early, and to provide timely evidence-based, targeted supports (Fuchs et al., 2008) as part of a multi-tiered system of support aimed at preventing the consequences of entrenched reading difficulties. These consequences can include disengaged and disruptive behaviour, suspension and exclusion, early school leaving, under- and unemployment, and engagement with the youth justice system (Graham et al., 2020).

Are early signs of literacy difficulty generally recognised and responded to appropriately in the classroom? Teachers are often quick to identify students who exhibit attentional and behaviour difficulties (Hecht & Greenfield, 2002). However, previous research suggests that educators cannot always identify the antecedents of problematic behaviour, and some find it difficult to identify and provide appropriate supports (Graham, 2015). Given the high proportion of students with behaviour concerns who experience underlying (and often undiagnosed) language disorder (Clegg et al., 2009; Ripley & Yuill, 2005) and the interplay between language and reading difficulties (Snow, 2016), it is essential that teachers are supported to ‘look below the surface’ to understand what students’ behaviours might be communicating, and what supports/adjustments are therefore needed. As teachers play a critical role in identifying students who may require support and directing students towards appropriate avenues for support (Cohen et al., 1993), this study investigated the alignment between students’ early word-reading trajectories and teachers’ concerns about their students and the supports they reported providing.

Research context and approach

This article drew on empirical data generated through the ‘Supporting Behaviour in the Early Years’ project. The project, funded by the Financial Markets Foundation for Children and the Australian Research Council, has been investigating the emergence of disruptive behaviour in students, and has been exploring the question of whether changes in teaching practice might be helpful. The data collection has been longitudinal, carried out for six years in seven participating Queensland state schools.

The participating schools serve disadvantaged communities with Index of Community Socio-Educational Advantage (ICSEA) ranges between 1 and 2 standard deviations below the mean. While approaches to early reading instruction vary in the Australian context, the most common approach, supported by the Australian Literacy Educators’ Association (ALEA), involves following a ‘Balanced Literacy’ strategy in the early years, where various forms of phonics instruction tend to be embedded within a context that focusses on meaning.

The recently published Graham et al. (2020) article presents data relating to 118 children from the participating schools who were tracked from Grades 1 to 3 during the course of this research project.

Each year these students completed the standardised Test of Word Reading Efficiency – Second Edition (TOWRE-2; Torgesen et al., 2012). The TOWRE-2 comprises sight word reading and phonemic decoding of pseudowords – an assessment strategy very similar to the Phonics Check that has been the topic of much heated debate in Australia. Standardised scores on the TOWRE-2 are age-normed, and may be interpreted in terms of achievement categories. The ‘average’ range on the TOWRE-2 corresponds to standard scores of 90 – 110; standard scores above 111 are ‘above average’; and standard scores below 89 are ‘below average’, with scores less than 80 considered ‘poor’ and less than 70 ‘very poor’.

In addition to the collection of data on the TOWRE-2, each year all students’ classroom teachers participated in a semi-structured interview probing their concerns about the students’

learning and behaviour and asking for information about the support that was being provided to the students. Each classroom teacher's responses about concerns and supports were mapped against individual changes in the student's reading achievement from Grade 1 to Grade 3.

In the results reported below, the groups' overall TOWRE-2 trends are documented, and patterns of change in reading achievement from one TOWRE achievement category to another are tracked against the information provided in the teacher interviews about concerns and supports provided.

Results: Word reading efficiency

In the sample of 118 children, the mean word reading efficiency standard scores on the TOWRE-2 declined significantly from Grade 1 to Grade 3. A similar pattern of decline was found when sight word reading and pseudoword decoding were analysed separately, although the pattern of decline in sight word reading from one grade to the next reached statistical significance only by Grade 3. Pseudoword reading standard scores were, on average, significantly lower than real word recognition at all grade levels.

The decline in word reading efficiency did not affect all students equally. At an individual level, most students stayed within the same TOWRE-2 achievement category (as described above). Some students improved and moved to a higher category at some point during the three years; almost half of these improvers were children who spoke English as an additional language or dialect. Just under 20 per cent of students in the sample declined in efficiency of word reading at some point. Overall, there was a decline in the number of 'above average' students in each year, with a proportionate increase in the number who were only in the 'average' range.

There was a persistently high number who remained in the 'below average' throughout. Relative to the total sample, the consistently 'below average range' group contained disproportionately high numbers of boys, and disproportionately high numbers of students who were from English speaking, rather than linguistically diverse, backgrounds.

For the purposes of this article we will focus on three sub-groups within the sample who showed distinctive patterns of change in TOWRE achievement categories over the three years: those who improved overall (n=7), those who declined overall (n=10), and those who were persistently below average over the three years (n=26). These were the three groups that showed the highest levels of reported concerns from teachers over the three years.

Results: Teacher concerns and supports provided

Improving group (n=7).

- Students in this group had word reading efficiency scores that were in the below average range in Grade 1 but had improved to at least the average range by Grade 3.... it is essential that teachers are supported to 'look below the surface' to understand what students' behaviours might be communicating, and what supports/adjustments are therefore needed.
- Teachers had concerns about six of the seven students in this group and the focus of their concerns were relatively consistent over time (e.g., typically concerns related to learning or both learning and behaviour).
- Not all students in the improving group who attracted teacher concerns received support. Where support was provided, most students received English as a Second Language (ESL) support and one student received speech pathology support. Only four of the seven students in this group received support that was specifically related to reading during Grades 1-3.

Declining group (n=10).

- Students in this group had word reading efficiency scores that were in the average range in Grade 1 but had declined below average by Grade 3. The decline was most severe in pseudoword reading, with some slipping to standard scores of below 80, putting them into the 'poor' or 'very poor' achievement categories.

- Teachers had concerns about seven of the 10 children in Grade 1 but only four of the same 10 children in Grades 2 and 3, despite evidence of a decline in reading competence. Teachers also did not express concerns about the same students in consecutive years, with only one child in 10 drawing concerns from their teachers across Grades 1-3.
- Almost half the students in this group were not receiving additional support in each year from Grades 1-3. For the six students receiving support in Grade 1, one received support for speech, one for oral language, one for numeracy, gross motor and generic 'literacy' support and one had additional floating teacher aide support in the classroom. Only one child received specific reading related support in any year, and this was the same child (in Grades 1 and 3).

Persistently below average group, (n=26).

- The 26 students in this group all demonstrated persistently below average word reading efficiency scores at each of the three timepoints. Many students in this group also tended to slip from 'below average' into the 'poor' and 'very poor' subcategories over time. None were in the 'very poor' category in Grade 1 but by Grade 3, 15 children had fallen into this category.
- Teachers' concerns were consistent across Grades 1-3 for only seven of these 26 children. Worryingly, teachers reported no concerns about six of these children at least once across the three years.
- Despite persistently poor word-level reading scores and relatively stable teacher concerns, the number of students receiving no support in this group increased from Grade 1 to Grade 3. Although 21 of the 26 received some support in Grade 1, this support was largely generic: additional teacher aide time, social skills support, and/or supports of questionable efficacy, e.g. wobble chairs. Only 10 students in this group received reading-related support at any

time in Grades 1 to 3, and for most this occurred only once and was not sustained or systematic.

Discussion: Reading Progress

For the overall sample of 118 children in the seven participating schools, our analyses of results on the TOWRE-2 revealed a significant decline in scaled scores over time relative to age norms. While declines were demonstrated in both phonemic decoding and word recognition, the decline was significantly greater in children's phonemic decoding skills. Given that both phonemic decoding and word recognition skills are necessary for reading competence and access to the school curriculum beyond the early years, these results are concerning. It is notable that a recent longitudinal study indicated that early decoding and oral language skills explained 99.7% of the variance in reading comprehension at 7 years of age (Hjetland et al., 2019). These were schools in which the gap in literacy skills was starting to widen.

Our analyses did, however, identify a small group of students that demonstrated improved phonemic decoding and word recognition overtime. Almost half of these students were from a language background other than English. It is likely that access to ESL and speech pathology support, as well as immersion in an English-speaking learning environment contributed to these students' profiles of improvement.

Another important finding from this study was the relative deterioration in phonemic decoding and word recognition skills in the 'declining' and 'persistently below average' groups. Children in these groups were doing better in Grade 1, relative to age norms, than they were in Grade 3. Further, the decline over time from the 'below average' to 'poor' or 'very poor' subcategories indicates that these students' reading difficulties were becoming more severe as they moved through their early school years, and that they did not receive effective reading support or intervention. Rather, if they were provided with support it was in the form of wobble chairs or behaviour plans. It should also be noted that extra teacher aide time was the most common support

provided, and this resulted in students with the greatest need for one-to-one qualified teacher assistance being under the supervision of the least qualified practitioner in the room for their special learning needs.

The findings from this study also challenge the proposition that social background or language background can be used as an explanation for these academic difficulties. All students in this study attended schools in areas of socio-economic disadvantage. Further, all students in the declining group were demonstrating phonemic decoding and word recognition skills in the average or above average range in Grade 1, but their skills declined to below average in subsequent years. Even the 26 children in the persistently below group were doing better in Grade 1 than they were in Grade 3. It cannot therefore be claimed that these results are the consequence of home background, given that home background would have been a contributing factor across grades, and appears to have set the children up for potential success at the outset.

Discussion: Supports provided

Teachers' ability to accurately identify and match need with appropriate support is essential for positive learning outcomes (Cohen et al., 1993). During interviews, we asked teachers whether the children they had raised concerns about were receiving additional support and if so, what types of support they were receiving. All teachers in this study interpreted 'additional support' to mean support beyond their own teaching. Teachers typically worked on the assumption that behaviour affected learning. This included formal behaviour plans, guidance counselling, extra teacher aide time, or participation in programs that focused on social skills or literacy. No teachers described inclusive practices, such as making reasonable adjustments, as examples of additional support. The most common type of support reported was teacher aide time.

There were clear discrepancies between teachers' reported concerns and the type(s) of support provided. In some cases, while teachers expressed no concerns about a student, the student

was nevertheless in receipt of support(s). Conversely, teachers expressed concerns about other students who were not receiving supports.

Overall, our analyses of teachers' reported concerns and provision of supports revealed variability in both the existence and type of concern. Teachers in this study rarely mentioned reading as an area of concern, and rarely considered that behaviour might be an indication of underlying learning difficulties – even with the group who were persistently 'below average' in terms of word reading efficiency. Teachers typically worked on the assumption that behaviour affected learning. This points to the possibility that behaviour may act as a 'red herring', resulting in behaviour interventions, at the expense of looking at underlying academic difficulties and providing targeted support for learning (Graham, 2008).

Conclusions

Persistent early reading difficulties typically result in ongoing academic underachievement and negative trajectories related to school engagement, behaviour, and attendance. It is essential that students who present with early reading difficulties are identified and supported in the early years, using timely, targeted evidence-based interventions. Classroom teachers play a critical role in identifying at-risk students and facilitating support. This research suggests that more fine-grained evidence-based assessments are needed to accurately identify children experiencing early reading difficulties. The identification of weaknesses needs to be sensitive to the possibility that early strengths in sight word knowledge can mask potential serious difficulties with decoding.

Teachers' reported concerns indicated that some children's externalising behaviours may distract teachers from identifying reading difficulties. When support is provided, it is often generic or behaviour-related, whereas targeted, evidence-based reading intervention is comparatively rare.

Departmental level policies that mandate the use of word-level reading tasks, such as the Phonics Screening Check, could assist teachers to accurately identify students experiencing early reading difficulties (Wheldall et al., 2019).

The misalignment between teachers' reported concerns and the support that they report providing, points to a potential need to provide teachers with opportunities to engage in professional learning to help them better interpret students' presenting difficulties, which would build their knowledge and confidence in making more accurate support recommendations.

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