



RESEARCH SUMMARY: Shared book reading and Key Word Sign

This research summary includes a review of three recent papers. All three are available open access so you can read them yourselves as well as reading this summary.



Jeremic, M., Stojanovik, V., Burgoyne, K., & Pagnamenta, E. (2023). Shared book reading as a context for language intervention for children with Down syndrome: a mini-review. *Frontiers in Psychology*, 14, 1176218
<https://doi.org/10.3389/fpsyg.2023.1176218>

Frizelle, P., Allenby, R., Hassett, E., Holland, O., Ryan, E., Dahly, D., & O'Toole, C. (2022). Embedding key word sign prompts in a shared book reading activity: The impact on communication between children with Down syndrome and their parents. *International Journal of Language & Communication Disorders*, 58(4), 1029–1045.
<https://doi.org/10.1111/1460-6984.12842>

Sheehy, K., Budiyanto, Widayati, S., & Rofiah, K. (2023). Towards inclusive practice in Indonesian kindergartens: Evaluating the impact of Sign Supported Big Books. *Journal of Early Childhood Research*:
<https://doi.org/10.1177/1476718X231188467>

Summary of Key Messages

Shared book reading (SBR) is a valuable strategy for supporting participation and language development for all children. Embedding Key Word Sign (KWS) in shared book reading can enhance the benefits.

- Books are read frequently to young children and so create an ideal opportunity to support communication partners to use signs.
- Frequent practice is necessary to become confident sign models and reading books allows for repetition and checking of sign accuracy if a picture or prompt is provided.
- This can be used by both parents and teachers relatively easily if provided with suitable books.
- Provision of the books is important, and it is helpful to include a guide to the signs needed.
- SBR strategies may be beneficial if used in combination with another intervention (such as KWS) to enhance children's language and communication skills.
- Teachers may need assistance to understand that this is an activity which can be used with all children, both with and without a disability.

More about this research

Shared book reading (SBR) is a popular intervention approach for children with additional communication needs. It involves parents and teachers regularly reading with their children. Parents are typically taught strategies for developing language during book reading activities. This is an approach that builds on a common activity that many parents engage in regularly and so parents find it easy to incorporate into their everyday routines. There is evidence of its effectiveness for children with a range of communication needs including those with a disability. This research summary includes information on some studies that included Key Word Sign (KWS) as part of the intervention.

What did the researchers do?

Jeremic et al. (2023) identified and reviewed eight articles about SBR and children with Down syndrome (DS). Five of the papers were “intervention” studies where researchers taught the communication partners how to read the story with the child in order to develop their language. Three of the studies included KWS as part of the intervention. The remaining three studies were non-intervention studies. Of these, two provided adapted SBR materials. For example, Burgoyne and Cain (2022) embedded questions in the book to help parents remember to ask those questions while Frizelle et al. (2022) embedded KWS within books.

This very recent review paper is interesting because it discusses some of the concepts that are part of the KWS approach such as embedding sign in the environment, modelling signs and introducing KWS through daily routines.

Frizelle and colleagues (2022) in Ireland used the key word sign approach called Lámh. They embedded key word signs into the books and compared how parents read to their children using books with embedded signs compared to reading books that did not have the embedded signs.

Books were chosen that were readily available, including Spot books by Eric Hill, and Bing books by Ted Dewan. The books were chosen because they included appropriate language for children who were at a one-to-two-word level. The number of utterances in each book varied between 28–31 (‘Spot’ books) and 50–62 (‘Bing’ books). Each book was modified so that the text to be signed was underlined in red. Two to three phrases per page were chosen to be signed and some additional words were added as suggestions for parents to sign as a model for the child.

The researcher went to the family home and first taught the signs for the book to the parent. They were reminded about how to use KWS (sign only the key words, speak at the same time). They practised the signs with the researcher for about 10-20 minutes and then read the book to their child. They were also asked to read one of the Spot or Bing books to their child without signing.

The researchers measured the number of signs the children used and how often they initiated interactions. They also recorded how often the child initiated an activity (such as turning the page) and how engaged they were in the activity. Parent measures included their mean length of utterance and vocabulary diversity.

Sheehy et al. (2023) investigated the use of Sign Supported Big Books (SSBB) in 214 kindergartens in Indonesia and surveyed teachers who used the SSBB with children both with and without disabilities.

Indonesia has created a key word sign approach based on Signalong from the UK. This research involved adding a single sign resource on the back of the pages of the big books used for classroom teaching to

remind the teachers to use the sign. Prior to this study, a group had created an app called SIDRA (Signalong Indonesia Digital Read Aloud) (Signalong Indonesia, 2021) which was also evaluated.

Teachers who participated in the study were provided with 3 SSBBs and a teacher manual. They were then invited to complete a survey about both the big books and their use of the SIDRA app. Teachers reported using the SSBB between once per week (35%) and once per day (10.3%).

What did the researchers find?

Frizelle et al. (2022) found that simply embedding KWS into books promoted use of KWS and positively impacted the child's participation. They found that children attempted to sign significantly more when signs were used during the reading. The children also showed significant increases in their levels of attention and initiation. Parents used more utterances and shorter sentences in the signed versus unsigned condition.

The review paper by **Jeremic et al. (2023)** looked at studies where a range of language strategies were embedded in books, including KWS. There was evidence that question prompts and the use of key word sign in SBR was associated with increased child participation and communication.

Sheehy et al. (2023) reported that teachers enjoyed using the approach and described ways in which it changed their teaching including:

- improved comprehension of the story by all children;
- being inclusive of children with a disability;
- that they had or intended to show the approach to other teachers in their school.

Few of the teachers reported downloading the app and preferred to be given the books with signs included. However, those who had used the app found it useful.

One of the key issues reported by the authors was that teachers needed a better understanding of KWS and who it can benefit. The authors are keen to do more work to emphasise that this approach can be used with and has benefits for all children.

Studies where signs were included in book reading indicated positive results with parents and children using more language and signs.

What does this information mean for practice?

Shared book reading improves parents' language modelling, and language and pre-literacy outcomes for typically developing children and for children at risk of language delay.

The use of KWS as a core shared book reading technique is likely to be a fruitful avenue to facilitate growth in the language abilities of young children with Down syndrome. It is also likely that this applies to any child with additional communication needs.

Provision of sign resources supports the use of KWS for parents and teachers when reading books.

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