



Do same-language subtitles help children become better readers?

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Learning to read is challenging



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To become good readers, children need to have good decoding skills and practice a lot.

National Literacy Trust:

- $\frac{1}{3}$ of children enjoy reading in their free time
- $\frac{1}{5}$ children read daily outside of school

Can same-language subtitles help children read better?



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turnonthesubtitles.org

“Extensive research from top academics in many countries has shown that simply turning on the subtitles for children’s television improves literacy.

...we all now call on ... to all turn on the subtitles, by default, for children’s TV programmes.”



“Top scientists have proven that turning on subtitles of TV programmes can double the chances of a child becoming good at reading.”

Stephen Fry



“Just press the button and you will BLOW their tiny little minds with knowledge.”

Jack Black

Promising initiative, but existing evidence is poor.

Use eye-tracking to measure
how children engage
with subtitled television



Experiment 1: Do children in primary school look at the subtitles?

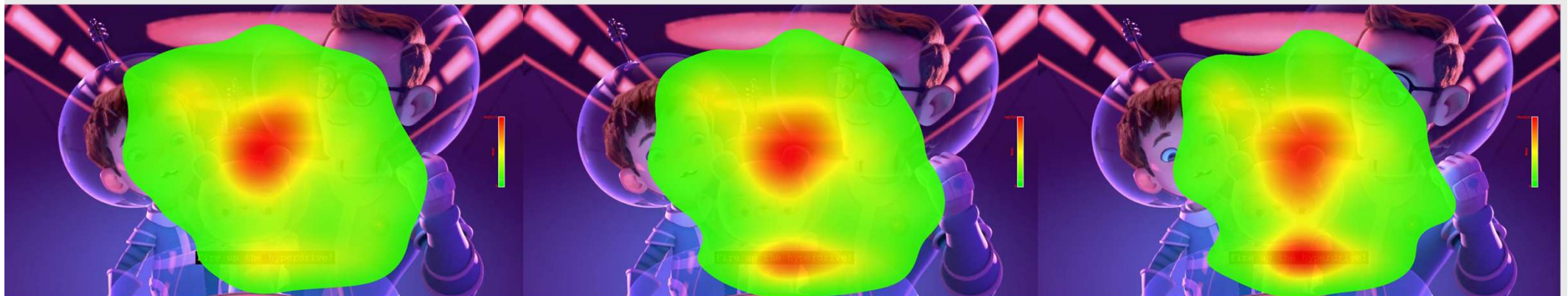
Experiment 2. Intervention: Does six weeks of experience with subtitles improve reading speed?

Experiment 1: summary (180 children tested)



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Children need to be relatively fluent readers before they even **look** at subtitles (reached by the end of Years 2-3).



Year 1

Year 2

Year 6

Animation with main findings



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Does watching television with subtitles improve children's reading?

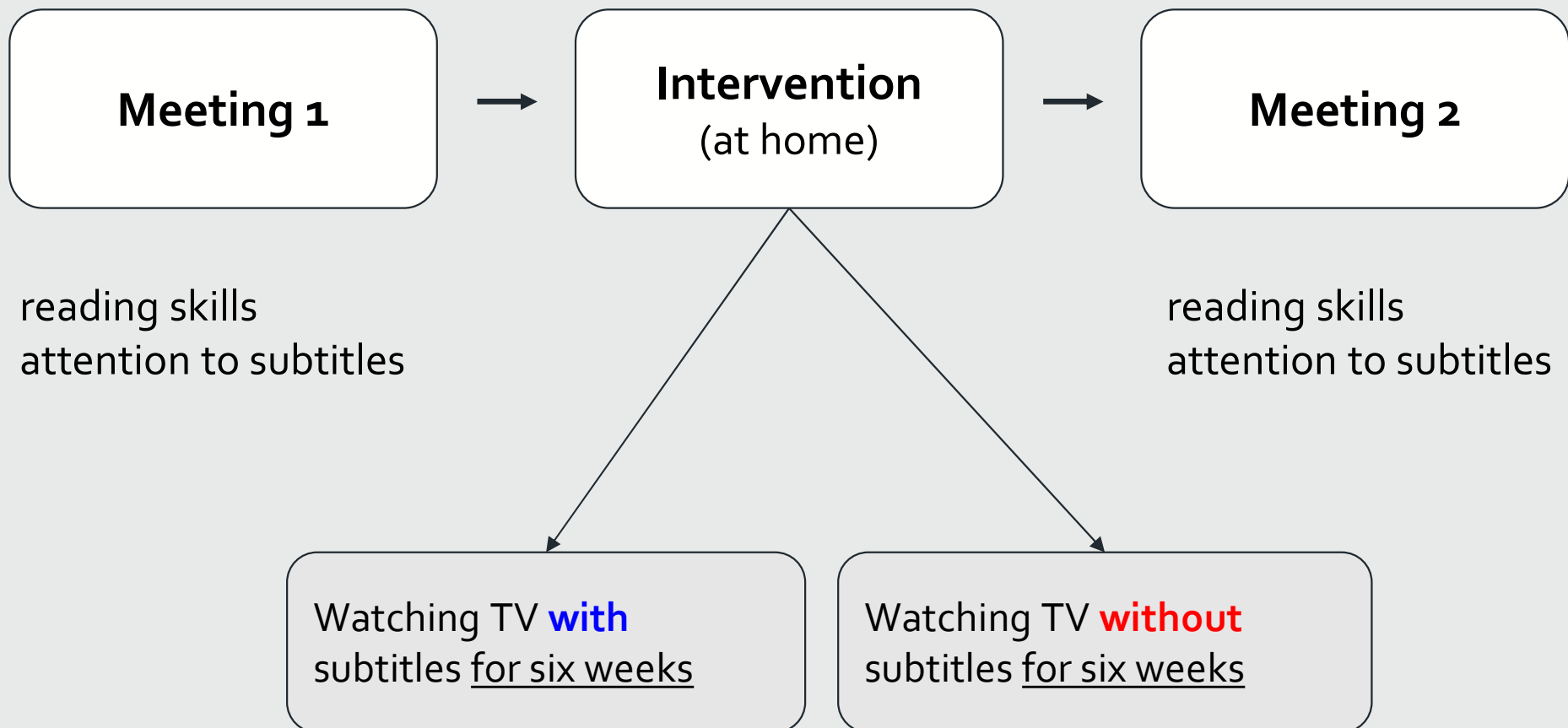
(1) Does experience with subtitles change how children interact with them while watching videos?

(1) Does experience with subtitles transfer to independent tests of reading fluency?

Three phases of the study



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Intervention and parents' assistance



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Mo

**Text
message**

- *TV?*
- *Subtitles?*
- *Duration?*

Tu

**Text
message**

We

**Text
message**

Th

**Text
message**

Fr

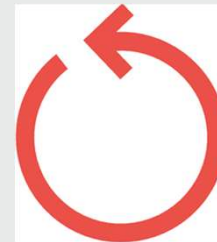
**Text
message**

Su

**Online
questionnaire**

- *TV viewing
time?*
- *Subtitles?*
- *TV shows and
series?*

Six weeks





127 children in Years 2-3 (tested over Summer and Autumn terms)

Subtitles group

64 children

30 boys, 34 girls

No-subtitles group

63 children

35 boys, 28 girls

Groups were similar in reading skills, vocabulary, reading attitudes.

Participants and intervention



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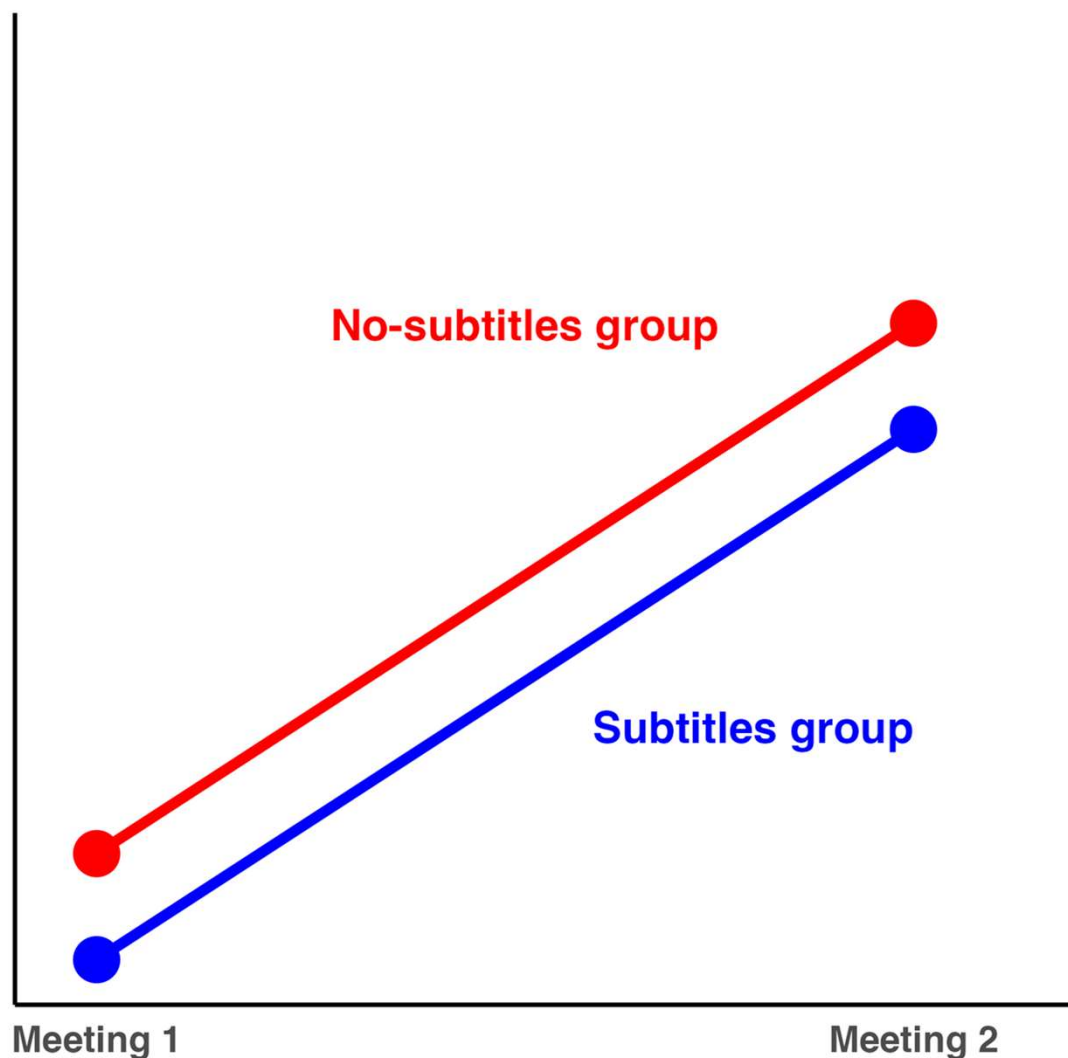
Groups were similar in reading skills, vocabulary, reading attitudes.

In total, **66** hours of TV viewing time

(~4,000 pages read)

In total, **64** hours of TV viewing time

What we found



Both groups of children improved their reading fluency.

Both groups of children paid more attention to subtitles over time.

No additional effect of subtitles. 😞



TOTS campaign received a lot of support and endorsement.
But our evidence doesn't support the claims.

- (1) Children don't look at subtitles until they are relatively fluent.
- (2) Large dose of subtitles doesn't improve reading fluency.

Education works: school reading curriculum has a positive impact on reading fluency in children, even over short time span.
Evidence-based education is best means of developing skilled readers.



Lopukhina, A., van Heuven, W. J. B., Crowley, R., & Rastle, K. (2025). Where Do Children Look When Watching Videos With Same-Language Subtitles? *Psychological Science*.

<https://doi.org/10.1177/09567976251325789>

<https://www.rastlelab.com/blog>



Thank you!



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We are grateful to the families who participated in our experiments, and to the schools that helped us connect with participants.





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