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EDA 6th All European Dyslexia Conference under the auspice of the National and Kapodistrian University of Athens.

Certificate of lecturing

This is to certify that

Maria Drossinou Korea

The European Dyslexia Association (EDA)

Umbrella for 40 national and regional organisations in 24 European countries. NGO in official relations with UNESCO. Full Member of the European Disability Forum (EDF). Consultative Status at the International Federation of Library Associations (IFLA).



6th All European Conference

Dyslexia and Dyscalculia Across The Lifespan

Harrar-Eskinazi et al. *BMC Pediatrics* (2022) 22:741
<https://doi.org/10.1186/s12887-022-03701-8>

ClinicalTrials.gov: NCT04028310


BMC Pediatrics

STUDY PROTOCOL

Open Access

Multimodal intervention in 8- to 13-year-old French dyslexic readers: Study protocol for a randomized multicenter controlled crossover trial



Karine Louna Harrar-Eskinazi^{1,2*} , Bruno De Cara¹, Gilles Leloup^{2,3}, Julie Nothelier⁴, Hervé Caci², Johannes C. Ziegler⁴ and Sylvane Faure¹

Participants

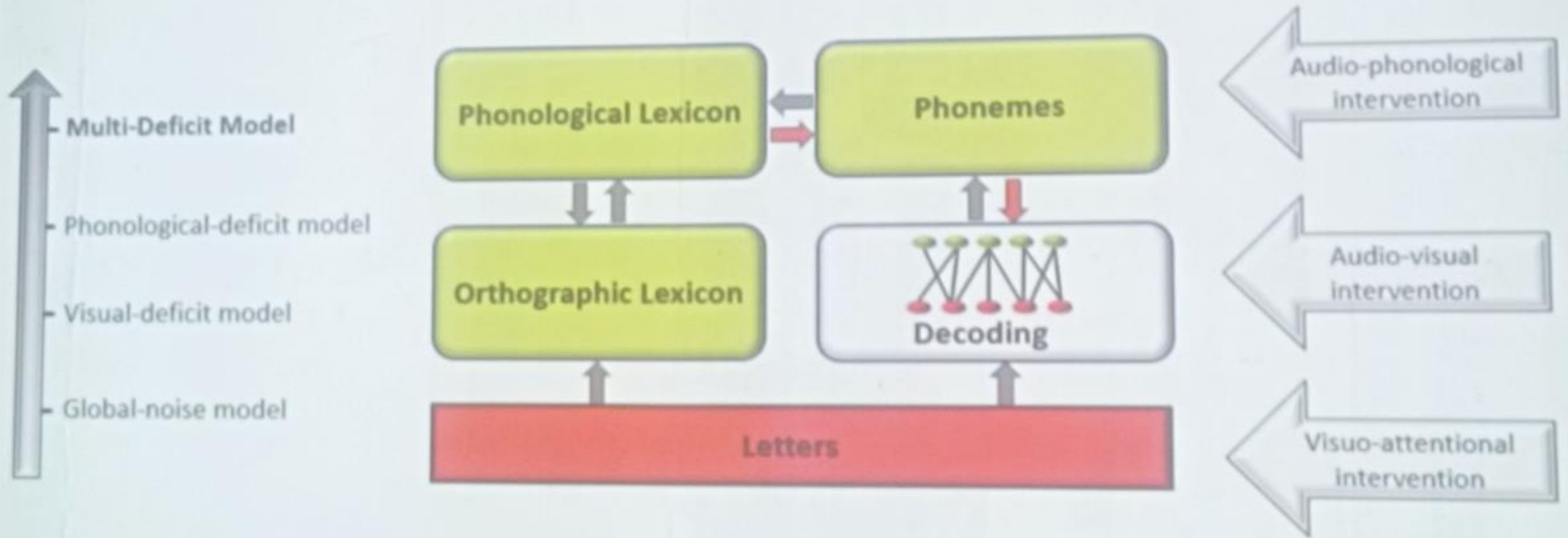
Criteria for inclusion

From 8 to 13 years old
French-speaking dyslexic readers
Reading and spelling skills ≤ -1.5 standard deviation

Criteria for non inclusion

Primary sensory deficit
Neurological disorders
Educational deficiencies
Attention-Deficit Hyperactivity Disorder (ADHD)
Developmental Language Disorder (DLD)

Scientific context

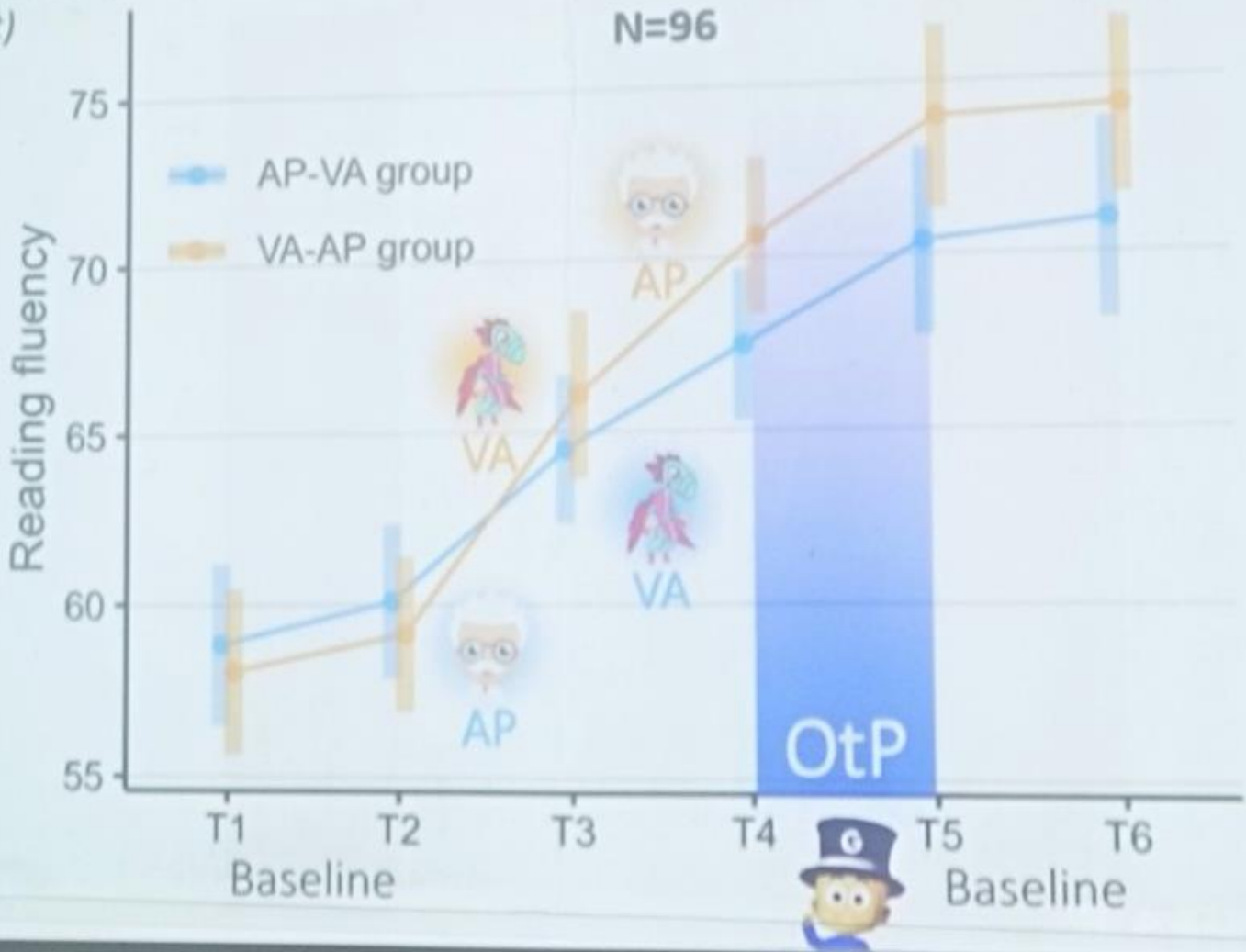


Multi-Deficit-Model-Self-Teaching

Perry et al., 2019; Ziegler et al., 2020

Mean reading fluency (words per minute) over time for each group

Correct words/min \sim Time * Group + $\mu(T1, T2)$ + age + Reading age lag + (1|subject) + (1|text)



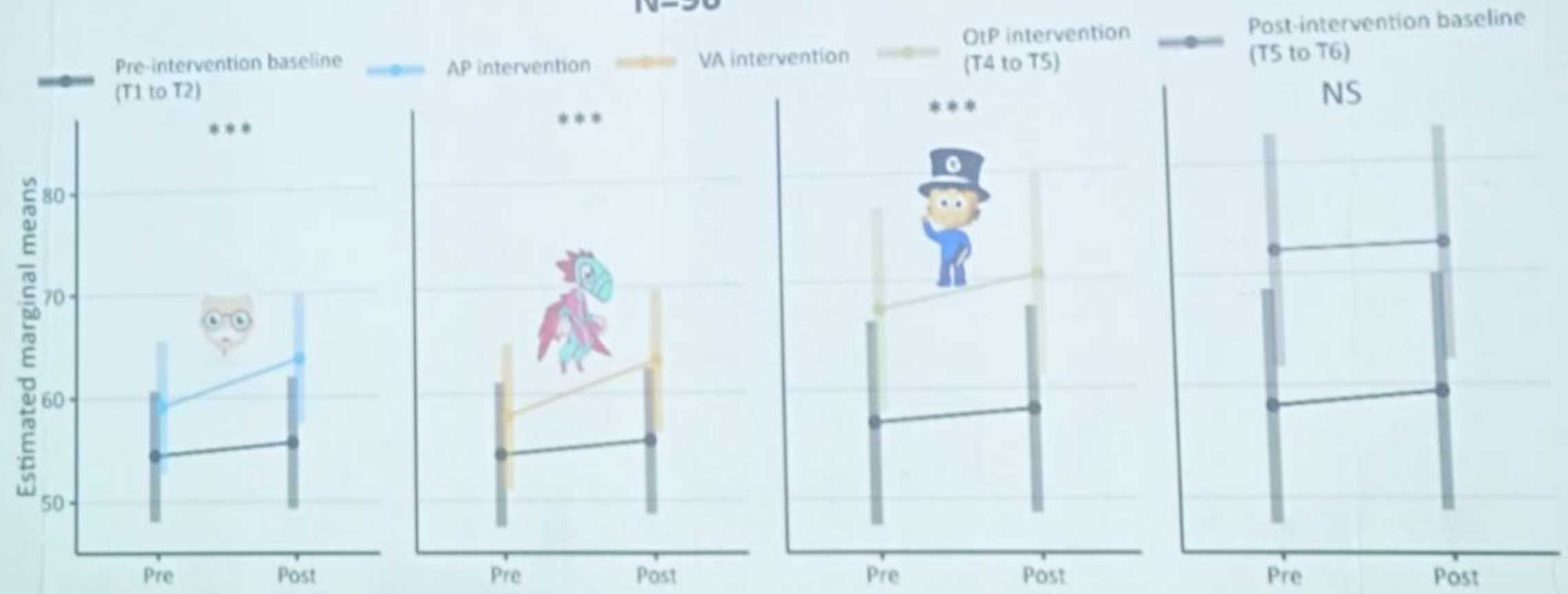
Reading fluency, spelling and reading comprehension N=96



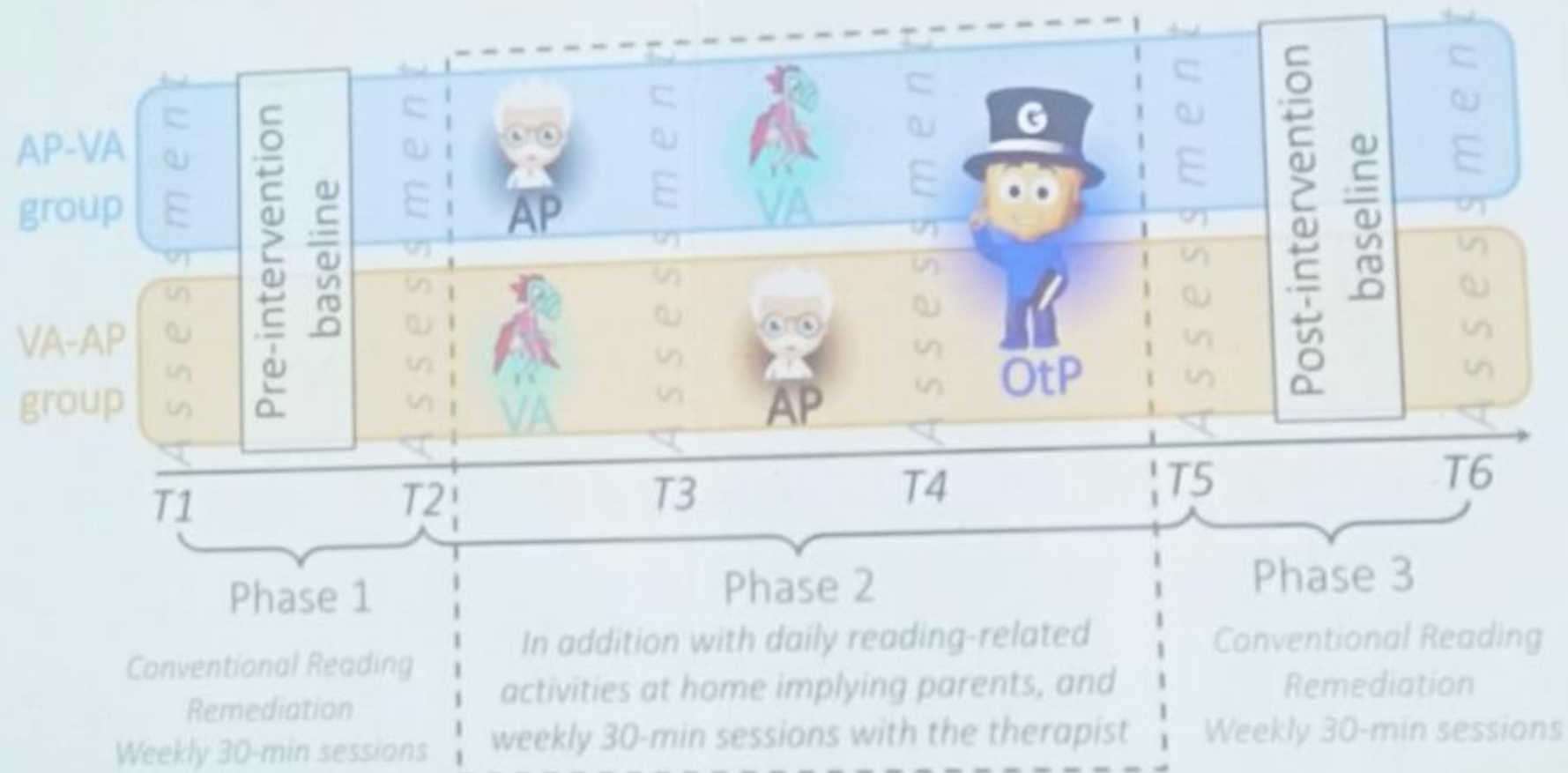
Estimated marginal means of text reading fluency for each intervention type compared to the pre-intervention baseline

Correct words/min \sim PrePost * Intervention + $\mu(T1, T2)$ + age + Reading age lag + (1|subject) + (1|text)

N=96



The three phases of the remediation program



Notes. AP: Audio-Phonological intervention, VA: Visual-Attentional intervention, OtP: Orthography-to-Phonology association intervention. Each intervention lasted 8 weeks.

**Multiple
deficits**

**Adapted to
the individual
profil**

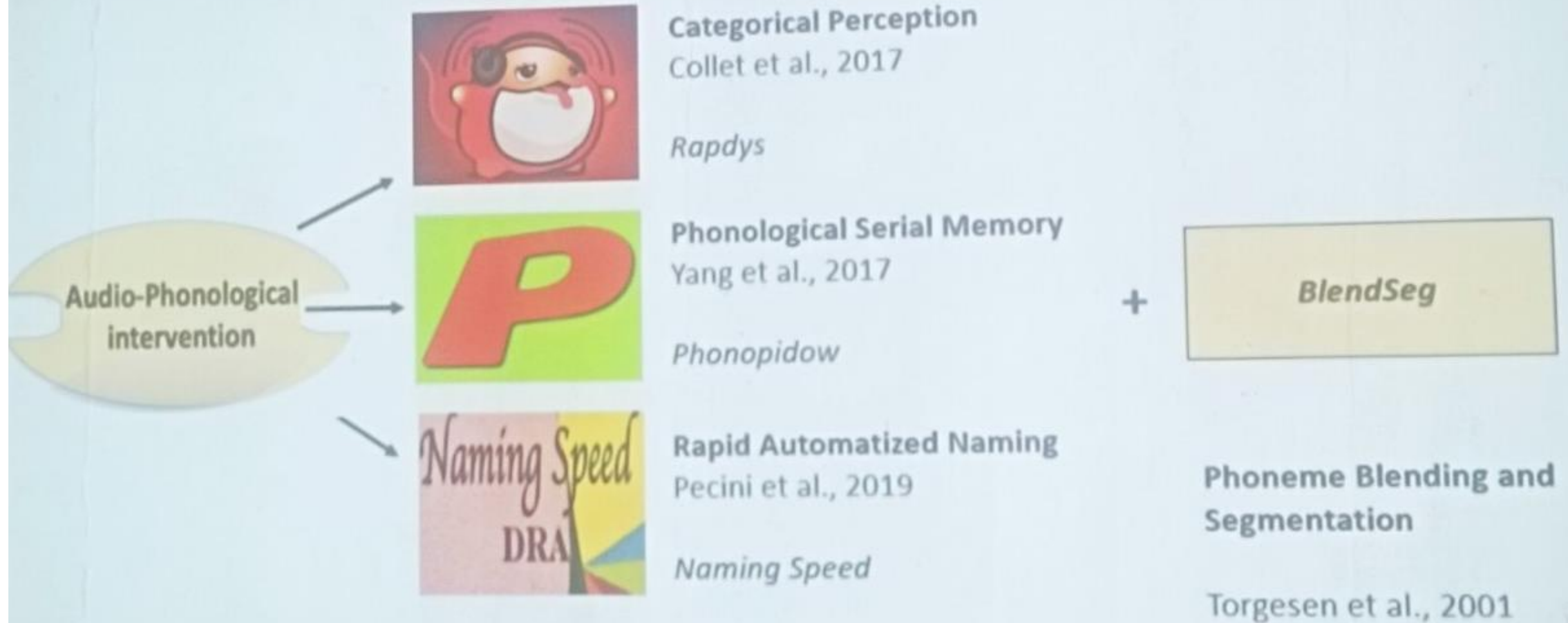
**Cognitive and
reading
interventions**

**Digital
tools**

**Parent-child-
therapist
partnership**

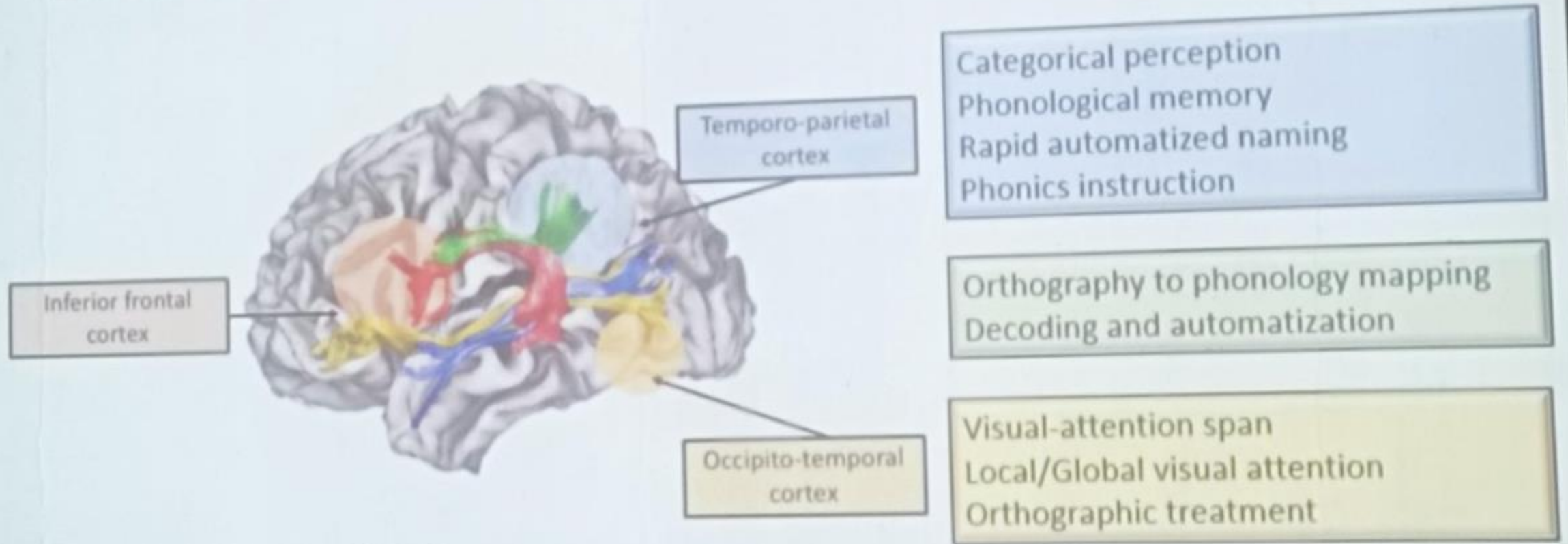
Audio-Phonological Intervention

15 min/day, 5 days/week, 8 weeks



Cognitive level

Brem et al. (2020), Liu et al. (2021), Vandermosten et al. (2012, 2017), Zhao et al. (2016), Paulesu et al. (2014), Richlan et al. (2009), Habib (2023)

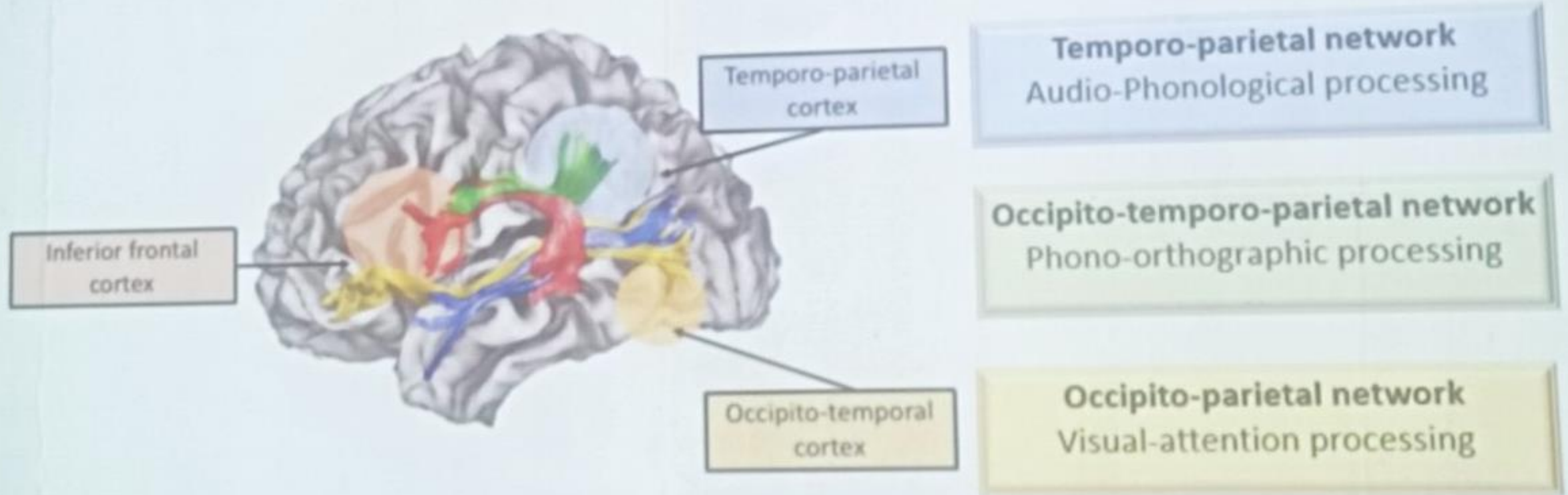


Ozernov-Palchik & Gabrieli (2018)

Menghini et al., 2010; Pasqualotto & Venuti, 2020; Ramus, 2003; Saksida et al., 2016; White et al., 2006; Ziegler et al., 2008; Zoubrinetzky et al., 2014

Neural level

Brem et al. (2020), Liu et al. (2021), Vandermosten et al. (2012, 2017), Zhao et al. (2016), Paulesu et al. (2014), Richlant et al. (2009), Habib (2023)



Ozernov-Palchik et Gabrieli (2018)

9 specific remediation programmes

Visuo-Attentional
intervention



ELOR

Audio-Phonological
intervention



BlendSeg

Orthography-to-
Phonology
intervention



ARMAR

Goals

1. Proof of concept
2. Efficiency of the intervention
3. Benefits compared to norms
4. Effect of the intervention order

Visual-Attentionnal Intervention

15 min/day, 5 days/week, 8 weeks



Discussion

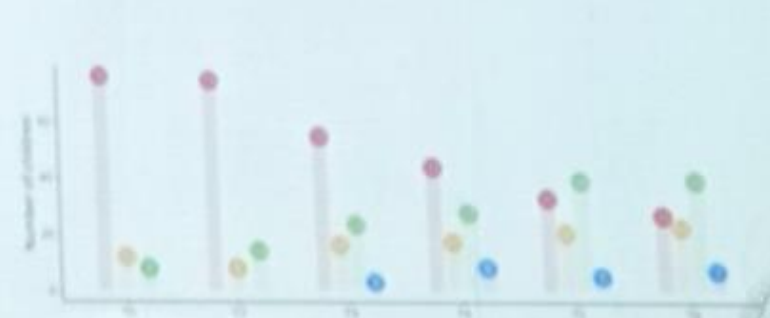
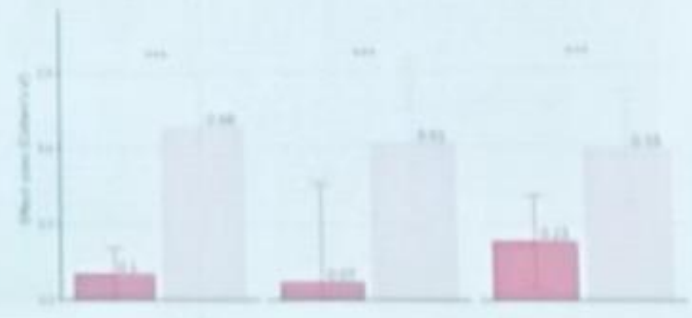
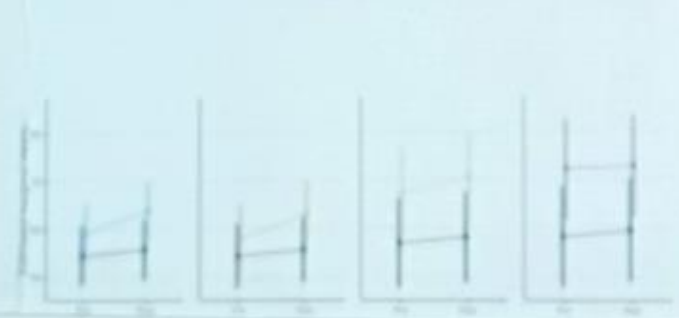
Multimodal and multi-componential program
AP-VA-OtP

Ecological and clinical validity

Improving reading fluency

Improving reading comprehension and spelling

49% of participants back into the normal range



Conclusion

- **Proof of concept**

Multimodal computer-assisted remediation
Supervised by speech-language therapists
Delivered at home by parents
Improved reading and spelling skills

- **Ecological and clinical validity**

Easy-to-implement
Highly effective
Inexpensive
Scalable

Η έρευνα για την δυσλεξία στην Ευρώπη

Sound-symbol learning in 4-5 year old children predicts reading performance three years later

Josefine Horbach & Thomas Günther

Department of Psychological Assessment and Intervention; Institute of Psychology; RWTH Aachen University

Introduction

Acquisition of reading requires to learn the code for representing speech as a series of visual symbols (Ziegler & Goswami, 2005)

Paradigms requiring the serial application of newly learned visual-verbal associations

- Artificial orthography (Aravena, Snellings, & Tijms, 2013) → normal readers outperformed dyslexic readers
- Dynamic measure of sound-symbol reading (Elbro, Daugaard, & Gellert, 2012) was able to differentiate between dyslexic and nondyslexic readers
- Morse-like sound-symbol paradigm (SSP) (Horbach, Scharke, Cröll, & Günther, 2015) predicted later word reading in kindergarteners over and above PA, verbal STM and RAN

Short time changes with learning predict short term changes across development (Bonte & Brem, 2024).

Research question

- Is performance in SSP independent of the multilingual background of the children?
- Is performance in a simple Sound-Symbol Paradigm (SSP) assessed in preschool age (4 to 5 year old children) predictive for later reading performance?

Method

Sound-Symbol Paradigm (SSP)

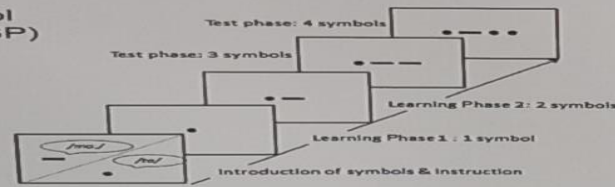
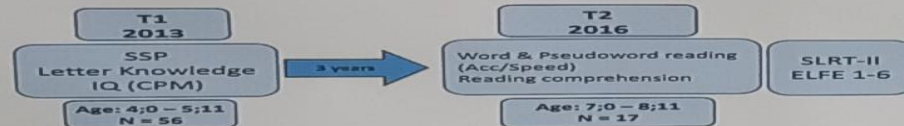


Fig. 1. Task procedure of the sound-symbol paradigm.

Longitudinal Design

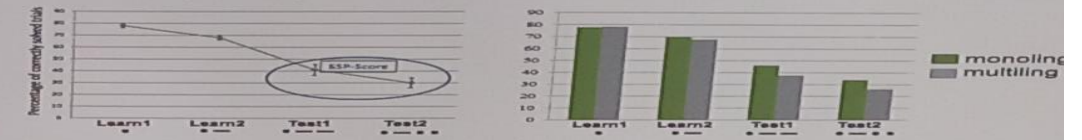


Sample	T1	T2	p
N	56	17	
Age	4.9	8.1	
% male	39	41	.885
% multilingual	48	65	.022
SSP (M (SD))	36 (30.0)	47 (33.3)	.185
LK max. 26 (M (SD))	3.8 (5.9)	5.5 (6.1)	.302
IQ (M (SD))	87.3 (14.6)	91.4 (17.1)	.307

Note. t-tests for continuous variables, chi² for categorical variables

Results

1. Accuracy SSP (T1)

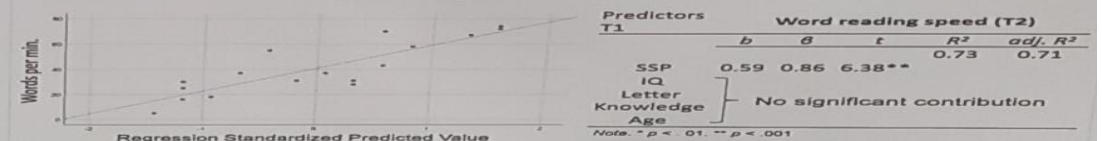


2. A. Correlations between predictor and outcome measures

		word	pseudoword	comprehension
T1	SSP	.855**	.807**	.817**
	LK	.043	-.033	.170
	IQ	.602*	.543*	.463

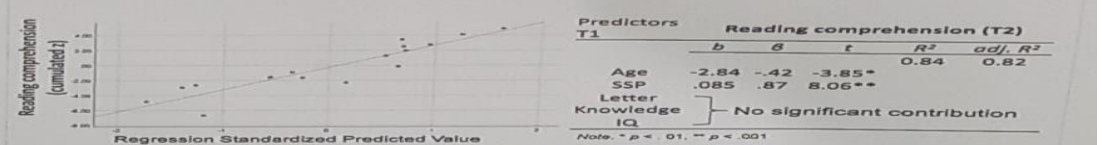
Note. * p < .05, ** p < .01.

2. B. Prediction word reading



Note. * p < .01, ** p < .001

2. C. Prediction reading comprehension



Note. * p < .01, ** p < .001

Conclusion

- SSP: good predictor of later reading performance in a language with statistically reliable spelling-to-sound relations
- Applicable in young age and multilingual children
- LK is highly dependent on parental / educational support → we assume that children in our socioeconomically diverse sample did not have much opportunity to acquire letter knowledge in their home environment.
- SSP challenges students to acquire completely new spelling to sound relations, simulating a core aspect of natural reading acquisition → independent of parental / educational support
- Future work will test this new paradigm in more intransparent languages like English

References

Aravena, S., Snellings, P., Tijms, J., & van der Molen, M. W. (2013). A lab-controlled simulation of a letter-speech sound binding deficit in dyslexia. *Journal of experimental child psychology*, 115(4), 691-707.

Bonte, M., & Brem, S. (2024). Unraveling individual differences in learning potential: A dynamic framework for the case of reading development. *Developmental Cognitive Neuroscience*, 101382.

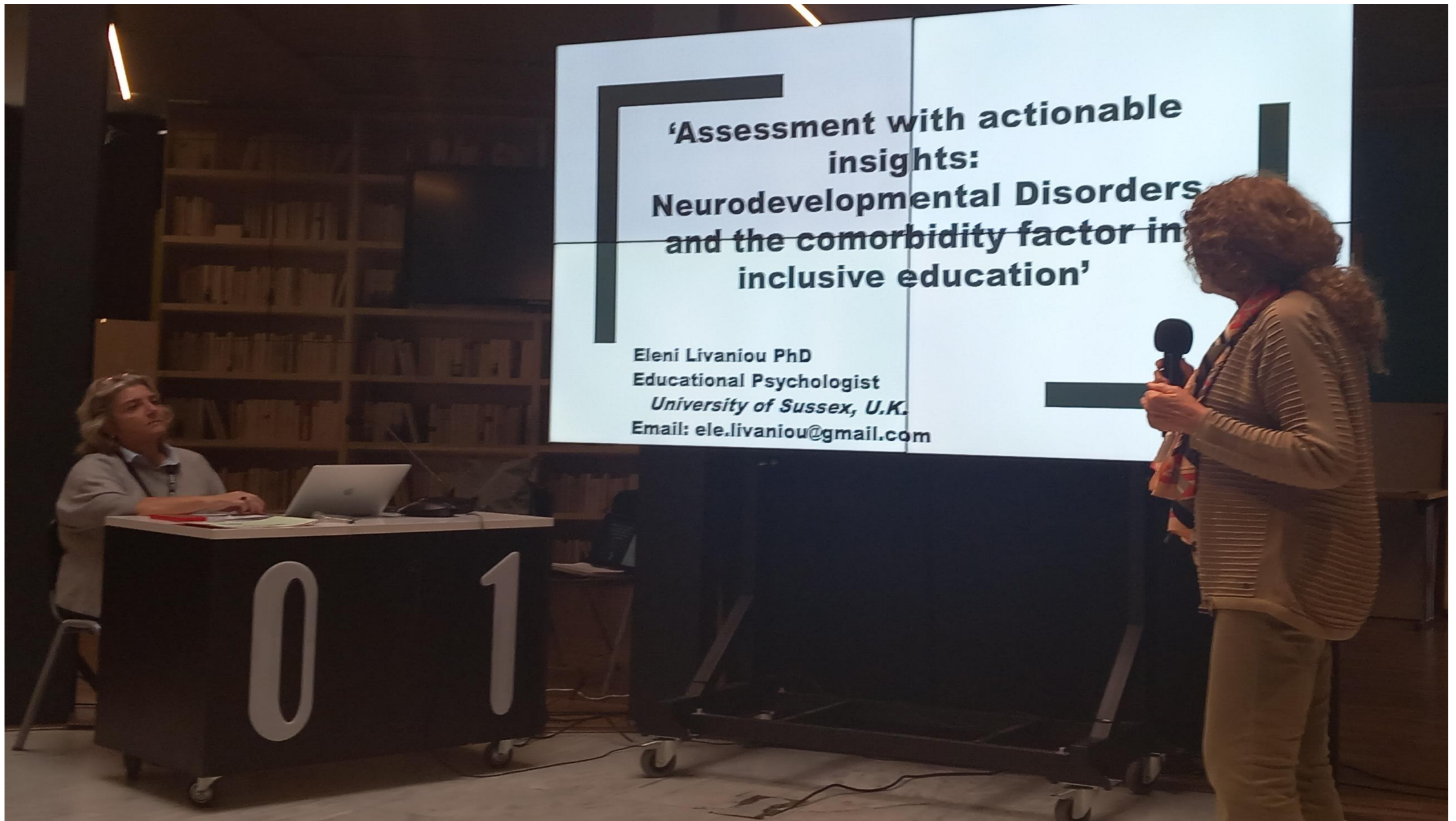
Elbro, C., Daugaard, H. T., & Gellert, A. S. (2012). Dyslexia in a second language?—a dynamic test of reading acquisition may provide a fair answer. *Annals of dyslexia*, 62, 172-185.

Horbach, J., Scharke, W., Cröll, J., Heim, S., & Günther, T. (2015). Kindergarten's performance in a sound-symbol paradigm predicts early reading. *Journal of experimental child psychology*, 139, 266-264.

Horbach, J., Weber, K., Opolony, F., Scharke, W., Radach, R., Heim, S., & Günther, T. (2018). Performance in sound-symbol learning predicts reading performance 3 years later. *Frontiers in psychology*, 9, 1718.

Acknowledgement

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PHYSICAL ACTIVITY PARTICIPATION IN CHILDREN WITH SPECIFIC LEARNING DISORDERS

Aarón Manzanares¹, Noelia González-Gálvez¹, Domenico Cherubini¹, Gabriel Cordovani², Giuseppe Zanzurino² and Fernanda Borges¹, María T. Morales-Belando*¹

¹Universidad Católica de Murcia
²Italian Dyslexia Association

Introduction

Dyslexia is a learning condition that impairs a person's ability to read, write, and process language effectively. People with dyslexia frequently encounter difficulties in educational and social settings, which can affect their self-confidence and their ability to fully participate in society. However, studies on dyslexia have shown that regular physical activity can greatly influence the development of individuals with this condition.



Objective

This study sought to understand the profile of adolescents with specific learning disorders (SLD) who participate in sports activities.

Method

237 adolescents from Italian nationality

Questionnaires

- Coach Support Scale (COS-CY)

- Sport Impact Scale (SIS C-Y)

- Rosenberg Self-Esteem Scale (RSES)

Results

60% diagnosed before 10y

66% engaged in sports

Sport most popular: soccer, swimming, colleyball, basketball and gymnastics

★ Sport participant = ★ level of personal and socio-relational well-being, ↓ school agitation
↓ use of smartphones and video games

Nearly 50% experienced difficulties related to SLD during sports practice (motor coordinations and memory issues).

Conclusion

The study uncovered a lack of support from coaches for children with specific learning disabilities (SLD). Many participants opted not to disclose their condition, fearing judgment or thinking it wouldn't make a difference. Overall, the findings emphasize the importance of fostering a supportive and inclusive environment within sports teams to help children with SLD feel comfortable expressing themselves. This study highlights the challenges and advantages of sports participation for individuals with SLD, pointing out the need for greater awareness and support within the sports community.

Funding: This research was funded by the European Union, in project Sports activities for people with specific learning disorders (SASLED), grant number 101089447.

References

1. Lorusso, M. L., Parini, B., & Bakker, D. Hemispheric Specialization and Dyslexia. World Dyslexia Forum. Unesco. 2010.
2. Molisso, V., Taurin, D. Sport as a compensatory and educational element in specific learning disorders. Formazione & Insegnamento 2022, 20(1 Suppl.), 230-239. https://doi.org/10.7346/faie-XX-01-22_20
3. Tresoldi, P., Vio, C. Confronto di efficacia tra trattamenti per la lettura in soggetti dislessici. Psicologia Clinica dello sviluppo 2003, 7(3), 483.
4. Venâncio, P. E. M.; El-Jalil, B. E.; Teixeira Junior, J.; Teixeira, C.G.O. Psicometricidade aplicada a niños con dislexia. Cuadernos de Educación y Desarrollo 2023, 15(10), 10409-10423.

g error analysis to study the word and pseudoword reading in adolescents with developmental dyslexia

K. Shtereva¹, N. Bocheva², M. Mihaylova², M. Stefanova²

¹ Sofia University "St. Kl. Ohridski"; email: kshtereva@uni-sofia.bg; ² Bulgarian Academy of Sciences, Institute

Introduction

Identifying the different reading strategies and the specific characteristics of the errors made by children and adolescents with developmental dyslexia (DD) is essential for creating effective assessment tools and designing appropriate remedial procedures.

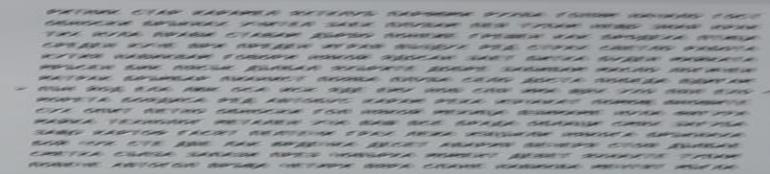
Findings from previous studies are often diverse, typically based on small samples, which further emphasizes the heterogeneity of this disorder. Current research aims to analyze word and pseudoword reading errors in children and adolescents with DD in comparison with TD, categorizing them into different levels, categories, and subtypes.

Methods

The study included 59 children and adolescents 8-16 years old. 28 of the participants were diagnosed with DD and 31 were with TD. Participants read orthographically unrelated 3- and 7-letter words and pseudowords presented on a screen (Fig. 1). Each reading session was recorded in an audio file and later transcribed into text. Error analysis was conducted using a specialized computer program, evaluating errors at several levels:

Methods

Word level: word/pseudoword (repetition, micro-repetition, reading); word length (3 and 7 letters); part of speech (nouns, verbs, other).
Syllable level: addition, omission, repetition.
Cluster level: simplification or complication.
Letter level: addition or omission of vowels/consonants; substitutions.



Results

Word level

Participants with DD showed a significantly higher frequency of errors on pseudowords (523) and words (447) compared to participants with TD. DD group showed a higher occurrence of word repetition and syllable-by-syllable reading during pseudoword reading. Accuracy in reading three-letter words was 65.8% for DD participants versus 98.6% for TD. For seven-letter words, DD achieved 65.8% accuracy, while TD reached 96.8%. In pseudoword reading, the DD group achieved 60.4% accuracy for three-letter pseudowords and 51.1% for seven-letter pseudowords, compared to 97.5% and 92.0% for TD, respectively. Pseudowords were generally more error-prone than real words for both groups, with participants showing a greater sensitivity to word length, particularly for longer pseudowords. DD participants demonstrated lower accuracy in reading nouns (69.1%), verbs (61.5%), and other parts of speech (63.7%) compared to nearly 99% accuracy for TD participants.



Figure 2. Correct, incorrect, and unread nouns, verbs, and other parts of speech calculated against total values per category for DD and TD

Syllable level

The group with DD shows a higher tendency to omit syllables compared to adding syllables (47 versus 30 for words and 29 versus 24 for pseudowords). In participants with TD, the differences are also noticeable, but here it is observed that adding syllables is more significant for pseudowords. In addition, only participants in the dyslexic group were observed to add or drop more than one syllable. Syllable repetition during reading is not a distinguishing characteristic of the DD group (Fig. 3).



Figure 3. Addition, omission and repetition of syllables when reading words and pseudowords for groups with DD and TD

Cluster level

When reading, participants with DD show a stronger tendency to simplify the cluster structure (69 for pseudowords and 40 for words) compared to complicating it (17 for pseudowords and 20 for words). These results suggest that they are more likely to simplify the structure of words, whether they are pseudowords or real words, although the simplification of clusters is more pronounced when reading pseudowords (Fig. 4).



Figure 4. Complication and simplification of the cluster structure in reading words and pseudowords for the groups with DD and TD

Letter level

In the DD group, a higher frequency of errors was observed, including consonant omissions or additions, multiple vowel or consonant substitutions, and letter repetitions. For pseudowords, 30 instances of adding 1 vowel and 2 consonants were observed in the DD group, compared to 47 instances of adding 1 consonant and 2 vowels in the TD group. A higher error frequency was observed for the letter 'p' (6). Visual letter substitution was observed predominantly with pseudowords in the DD group. The most frequent errors were the letters 'K' [K] and 'H' [H].



Figure 5. Addition and omission of letters in reading words and pseudowords for groups with DD and TD



Figure 6. Addition and omission of letters in reading words and pseudowords for groups with DD and TD

Conclusion

This study analyzes the reading errors of words and pseudowords in children and adolescents with DD compared to their typically developing peers. The results show significant differences in the frequency and types of errors at various orthographic levels (word, syllable, cluster, letter), with DD participants displaying more errors and more difficulties, particularly in reading pseudowords. The findings align with previous research suggesting that dyslexia primarily involves phonological processing, with difficulties becoming more pronounced as orthographic complexity increases. At the syllable and letter levels, omissions and substitutions were frequent in the DD group, indicating challenges in phonological processing and visual-orthographic processing.

Conclusion

Compared to previous studies, which often relied on limited orthographic levels, using both real words and pseudowords. This broader approach provides a clearer distinction between phonological and orthographic processing, leading to a deeper understanding of the specific difficulties encountered by individuals with dyslexia.

Acknowledgement

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Summary

Reading comprehension is a fundamental skill that contributes to the successful social and academic life of a person. Reading comprehension is achieved by the automatization of both basic skills, such as decoding and vocabulary knowledge, and more complex skills, such as the use of cognitive and metacognitive techniques. Successful reading comprehension depends both on the graphophonemic system of the target language and the learning profile of the learner. Difficulties occur especially due to the characteristics of each language. More specifically, English, which is the target language of this research, has a non-transparent linguistic system which poses important difficulties in decoding and fluency while reading. Focusing on students with specific reading disability (SRD), learning English as a foreign language becomes a very challenging procedure due to the combination of their inherent difficulties and the linguistic system of the language. Intervention and teaching of techniques and strategies regarding each skill is highly significant for learners' success. However, it is also significant that differentiation is not only limited to teaching but also extends to assessment. There is a number of differentiations that have been suggested for students with SRD, one of which being the differentiation of instructions, aiming at the increase of focus and the proper completion of the assessment criterion by learners. The present study investigates the effect of differentiated instructions on the performance of students with SRD in English as a second/foreign language (L2) and aspires to provide evidence for more representative and objective ways of assessment. It also investigates the effect of fatigue on the performance of SRD learners with the aim of providing insights on the length of assessment criteria.

Introduction

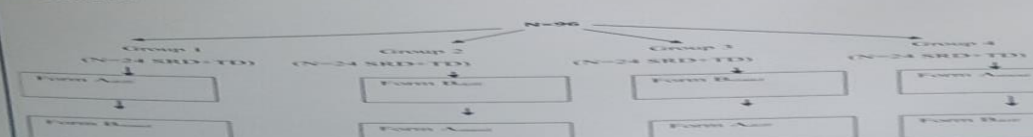


English language presents a non-transparent linguistic system, since there is no correspondence between graphemes and phonemes (De León Rodríguez, Buotler, Eggenberger, Laganaro, Nyffeler, Annoni & Müri, 2016), leading learners with SRD to facing significant difficulties in reading skills, such as slow reading rhythm, poor decoding, limited vocabulary and inability to combine information (Avtunovic, 2008; Ghelani, Sidhu, Jain & Tannock, 2004). Various differentiations have been proposed, one being differentiation of instructions (Andreou, Athanasiadou & Gana, 2019). Instruction differentiations, such as the reduction of sentence length and the use of presentation techniques, i.e. underlining and bold font, allow closer attention to instructions on the part of the learners. They also enable an informed completion of the criterion by SRD learners who present deficient metacognitive and strategic skills.

Methodology

Sample	SRD learners	Typical learners
N	48	48
Age M.	15.11	13.73
WISC-III-R	101.04	102.04
Test-A Decoding scale	94.51	104.31
Test-A Fluency scale	110.72	143.85

Procedure



Results

In the present study, a factorial ANOVA was used to compare the performance of the students under the differentiated instructions and the standard administration, while a t-test was used to measure the effect of fatigue.

- Regarding the SRD group's performance, there is a significant difference in both forms, that is $p < 0.001$ for form A and $p < 0.001$ for form B, the performance in the non-standard criterion being better.
- No statistically significant difference was documented between the performance of typical learners between the non-standard and standard administration ($p = 0.128$ for form A and $p = 0.037$ for form B).
- Fatigue did not affect the performance of SRD learners under the administration of differentiated instructions ($p = 0.753$ for form A and $p = 0.753$ for form B).

Estimated Marginal Means of Differentiated Instructions

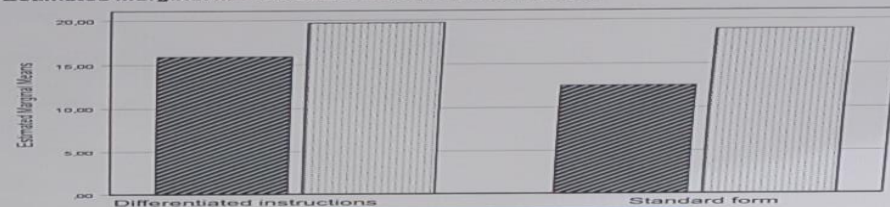


Figure 1: Means in form A

Estimated Marginal Means of Differentiated Instructions

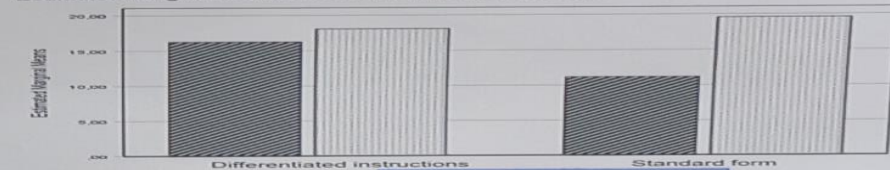


Figure 2: Means in form B

Discussion

Effect of differentiation on SRD learners' performance

- The findings of the research confirmed the improvement of SRD performance under the administration of differentiated instructions as described by the University of the State of New York (USNY, 2018).
- SRD learners present lower attention span, do not read instructions carefully and complete the criterion without implementing metacognitive techniques (USNY, 2018).
- SRD learners showed statistically significant improvement, since they focused their attention on the instructions, i.e. reading the text and rereading to complete the questions following the text.

Effect of differentiation on typical learners' performance

- Typical learners did not present statistically significant improvement under the differentiated instructions, since they do not present inherent difficulties in reading comprehension that demand differentiations (Kopriva, Emick, Hipolito-Deigada & Cameron, 2007).

Effect of differentiation on SRD learners' performance

- Statistically significant results were documented under the effect of differentiated instructions, which support that SRD learners need quicker than typical learners, and lengthy task instructions to understand the findings did not confirm the effectiveness of the differentiated instructions.
- However, the effect of fatigue on the performance of SRD learners and effect of not presenting and demanding differentiated instructions was not investigated.

Bibliography

Andreou, G., Athanasiadou, P. & Gana, E. (2019). ICT and specific learning disabilities: A proposed use of the software 'ReadEasy' in the foreign language learning by students with comprehension difficulties. *Scientific Journal of the American Psychological Association*, 17(2), 11-20.

Avtunovic, G. (2008). *Enabling the Dyslexic Learner: The Modern Use of Metacognitive Strategies*. Ph.D. Thesis, University of Thessaly.

De León Rodríguez, D., Buotler, K. A., Eggenberger, N., Laganaro, M., Nyffeler, T., Annoni, J. M., & Müri, R. M. (2016). The Impact of Language Difficulty and Proficiency on Reading Comprehension in Bilingual Learners. *Journal of Experimental Psychology: Applied*, 22(1), 1-12.

Ghelani, K., Sidhu, R., Jain, R., & Tannock, R. (2004). Reading comprehension and reading rate in students with reading disabilities and attention-deficit/hyperactivity disorder. *Journal of Learning Disabilities*, 37(4), 384-394.

Kopriva, J., Emick, J. E., Hipolito-Deigada, C. P., & Cameron, C. A. (2007). Do simpler assignments make a difference? Examining the impact of improved decision-making on the performance of English language learners. *Educational Measurement Issues and Practice*, 26(2), 11-20.

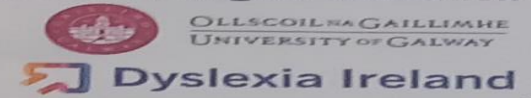
MacCullough, L., Bouquard, A., & Salsback, N. A. (2017). University students with disabilities: An exploratory study of learning practices, challenges and strategies. *Journal of Learning Disabilities*, 50(1), 3-23.

The University of the State of New York. (2018). *Testing accommodations for students with disabilities: A guide to guide decision-making and implementation*. U.S.A.: State Education Department.

Psychological adjustment and educational support: Experiences of students with dyslexia in higher education

Correspondence:
 clara.egan@universityofgalway.ie
 Twitter: @BrainbowPol

Ciara Egan, Casey Cowan, Kiana Carragher, Caoimhe O'Malley*
 School of Psychology, University of Galway*
 Dyslexia Ireland*



Background information

- Adults with dyslexia report difficulties with reading speed, written expression/structure, and time-management. Given the high literacy and time-management demands involved in moving from secondary school to further/higher education, this causes barriers to adequate learning opportunities for these students. 1-3
- Higher Education Institutions (HEIs) do provide an array of supports for students with dyslexia, including exam support and resources being available ahead of time, however research has suggested that availability of these is variable, and some these supports can be unhelpful or irrelevant. 3
- Here we used a mixed-methods approach to examine the experiences of adults with dyslexia in HEIs in Ireland of accessing these supports.

Interviews



- 5 ppts
- One-to-one semi-structured interviews
- Thematic analysis

Interview Schedule

Warm up chat
 Questions / Topics

- Course currently studying & level of enjoyment
- Supports received for dyslexia
- Ease of access to supports
- Were supports sufficient
- What additional supports do you feel would be helpful
- What do you think we should ask on our survey



Interviews influenced topics in additional supports questionnaire

Selected quotes:

Exam supports

"The extra time at exams, I only had a few exams but every exam I did, when it got to the normal time when the exam was up and I looked at the clock, I'm like "I would have failed". So like that extra 20 minutes, really, or however long it was, I can't remember, that I actually really wouldn't have been able to have actually done my exams without it."

Reliance on outside support networks

"there was a lot of pulling in family members to proof read everything. Because I wouldn't pick up on things, or I'd have used a word in the wrong context, and so, while I knew what I wanted to say I struggled to almost come across at times. So I'd always have someone proof read."

Negative experiences when accessing supports

"...it can be really sometimes a really dehumanizing approach to things like that, and it's kind of like you're an afterthought. From experience, from my experience, it might not be the same for everyone, from my experience I think dyslexia is often an afterthought when it comes to supports in universities and stuff like that."

"...I stated in that email that I was unaware of what supports were even available to me now. And absolutely no response. So I kind of just got on with it. I guess as you would say... So I just kind of dealt with it on my own so to speak."

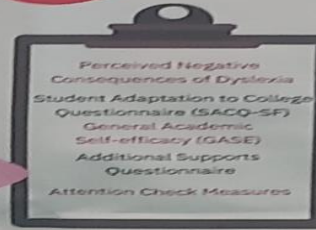
Positive, person-centered approaches

"But I thought their support system was better. Because it wasn't just purely "what supports do you need in place for this", they checked on your mental health and they had quite a lot of follow-ups with just checking in, making sure that you're good, that you're handling it well."

Online Surveys



- 27 ppts
- Online via phone / laptop



Greater feelings of institutional support was correlated with higher academic self-efficacy, feeling settled at the HEI, and lower depression.

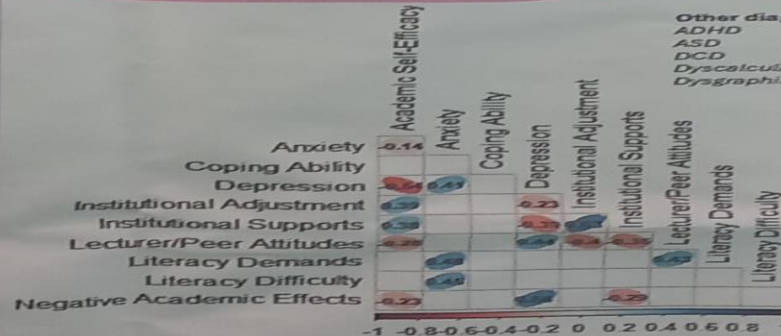


Figure: Matrix of significant correlations

Table: Demographic variables

Variable	Frequency or Mean (SD)
Age	33 (13)
Gender	
Woman	20
Man	6
Prefer not to say	1
Education level	
Postgraduate	12
Undergraduate	15
Receiving dyslexia support?	
Yes	19
No	8
Would benefit from additional support?	
Yes	27
No	6
Age at diagnosis	17 (13)
Identify as neurodiverse?	
Yes	16
No	11
Other diagnosis?	
ADHD	1
ASD	1
DCD	5
Dyscalculia	3
Dysgraphia	1

Courses with higher literacy demands were associated with higher self-perceived literacy difficulties, and poorer attitudes from peers/lecturers towards dyslexia.

Conclusions to date

- Students in interview highlighted the need for tailored supports, and that a one-size-fits all approach does not work.
- They highlighted inconsistent supports across institutions, and across courses and lecturers
- Many students reported relying on family/friends for proof-reading and ad-hoc spelling/grammar support:
 - Individual tutors to provide this help were a repeated suggestion.
- Survey data suggests that institutional support is related to students achievement, adjustment to their university, and their wellbeing.

References

1. ...
2. ...
3. ...
4. ...
5. ...

“It takes a village, so where is my Dyslexic Friendly Village?”

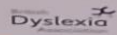
A personal perspective of what support is needed for parents and carers who have a child with dyslexia. Look at thoughts and feelings, alongside creating a nurturing & supportive village for the child and their family.

Author and creator: Emma Semi, mother to two dyslexic children, currently living in Malta.

Myths

“There is a common misconception that dyslexia only affects the ability to read and write. In reality, dyslexia can affect memory, organisation, time-keeping, concentration, multi-tasking and communication.

All impact on everyday life.”



Feelings of isolation

In our society today, parents/carers are becoming more isolated and the impact of loneliness is greater to someone with a child with special educational needs. This can affect all aspects of friendship, family and community life for many neurodivergent families.

“A typical example is waiting to collect your child from primary school and having no other parents/carers to share your feelings and then shutting down emotionally.” shared by an anonymous parent.

Cultural & intergenerational

As a parent/carer you may face many challenging conversations within your own culture, across the generations and relationships.

You may feel confused as to why there is limited understanding of neurodiversity and this can cause frustration and anger; when your safe space within your own community has changed and then as a parent you now become the **Advocate** for your child.

Concept: Let's create the ideal village of support through arts and crafts!

Through working with families and their children, we can create a closer community and discover new ways of how they would like to be supported. This can be structured through design, creation, conversation and laughter by creating a: **Dyslexic Friendly Village!**



In September 2024 a workshop took place with two dyslexic participants called Sophia (aged 8) and Ella (aged 11) in their home in Malta, designing and creating their own ‘**Dyslexic Friendly Village**’. They used paints, wooden houses, ribbons and many other different creative tools. This workshop included conversations around their creations.

The children spoke about:



Sophia said “I have created a nurture house, which is inspired by Minecraft as I play and enjoy it. After school, I enjoy playing Roblox as I can switch off”. It was noted that she was happy to express her feelings in this workshop and was proud of her creation.



Ella said “My village will have lots of fun people in it. This means having family and friends there including an art themed sweet shop”. Ella doesn't always express her feelings verbally, but nonetheless shows her enjoyment through singing and enthusiastically taking part in creating her village.



By creating a nurturing and holistic workshop with children and their families, this can enable a sense of belonging and a safe place where participants can share their feelings about dyslexia. This workshop can be delivered in schools, with practitioners and in homes. It can be a chance for families/carers across the generations to talk, to address the feelings of loneliness and to bring a dyslexic community closer together.

For further discussion contact: emmasemi24@gmail.com

Enhancing Dyslexia Awareness at the Copenhagen Teacher Education

PURPOSE

How can we increase opportunities for participation for our dyslexic students?

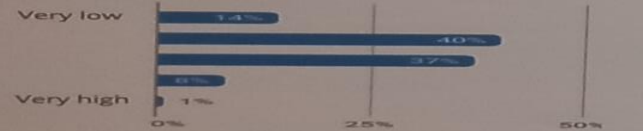
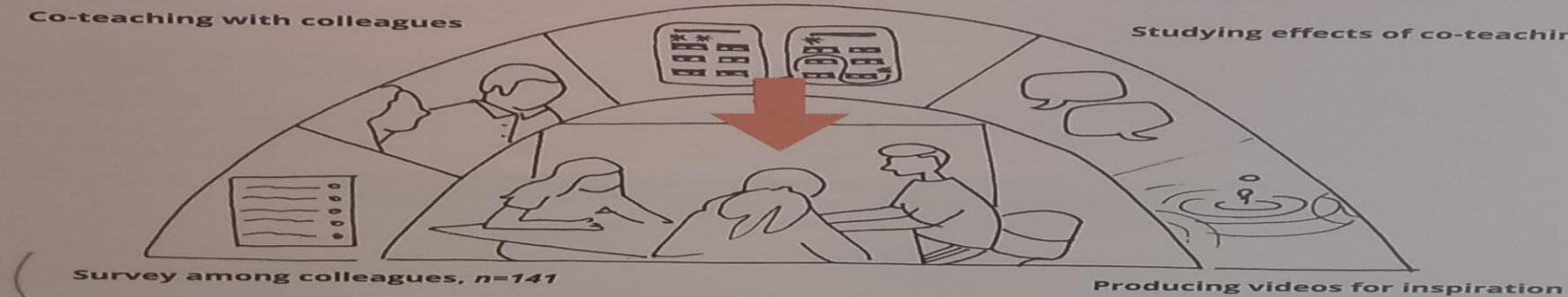
SECOND ORDER TEACHING

How can we teach our students to increase opportunities for participation for dyslexic pupils?

PROJECT DESIGN

Co-teaching with colleagues

Studying effects of co-teaching



SUPPORTING DATA: UNIVERSITY COLLEGE

Screening of new students
1970 of 3432
(Lind et al. 2023)

59 % untrained and struggling readers

15 % weak and untrained struggling readers

LEARN MORE



SUPPORTING DATA: PRIMARY AND SECONDARY SCHOOL

15-year-olds in PISA 2022
19 % poor readers

3rd and 4th graders in PIRLS 2021
19 % low reading levels or below

9th graders 2022/2023, The Danish Ministry of Children and Education
17 % are having dyslexic or fonological difficulties



Mette Høeghmark, PhD, Assoc. professor



Lene Hysted Sørensen, PhD, Assoc. professor

UNIVERSITY COLLEGE COPENHAGEN

XIP

NVOL
The National Centre for Dyslexia and other Reading Difficulties

THE PHONOLOGICAL SKILLS ASSESSMENT AND CORRELATIONS WITH DYSLEXIA

Authors

PhD, SLT **Simona Daniute**, simona.daniute@vdu.lt
Assoc. Prof. PhD **Lina Milteniene**, lina.milteniene@vdu.lt
SLT **Ingrida Staliuniene**, ingridastaliuniene@yahoo.com

Affiliations

VYTAUTAS MAGNUS UNIVERSITY Education Academy



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UNIVERSITY
EDUCATION
ACADEMY

Introduction

Phonological skills are defined as person's abilities to perform cognitive operations related to the phonological structure of oral language during decoding of written language. They encompass phonological awareness (PA), phonological short-term memory (PM) and rapid automatized naming (RAN). These are perhaps the most frequently analysed phonological processes related to reading in the scientific literature.

The research purpose

To reveal the theoretical characteristics of assessment of phonological skills and their correlation with dyslexia at the national and international levels.

Methodology

The analysis of scientific papers by Lithuanian and foreign authors based on the theoretical analysis of the concept has been carried out. The analysis was conducted in compliance with the following sequence: 1) the object of analysis (phonological skills) was set; 2) structural components of the concept (PA, PM, RAN) were pointed out; 3) characteristics that define the said components, their correlations with dyslexia as well as assessment features were identified.

Analysis

According to scientific research data, **assessment of phonological skills** includes (Figure 1): the assessment of PA, encompassing all four levels of skills (word, syllable, rhyme, phoneme); the assessment of PM, when repeating queues of numbers, words and nonwords; the assessment of RAN, when naming visual stimuli (colours, objects, numbers, letters, etc.) as rapidly and precisely as possible. Extensive research conducted in various foreign languages allowed demonstrating obvious **correlations between phonological skills and dyslexia**. It was found out that individuals with dyslexia had insufficient skills in this field. Nevertheless, results of the surveyed long-term investigations demonstrate that two indicators predict reading attainments in pre-school age best: PA and RAN.

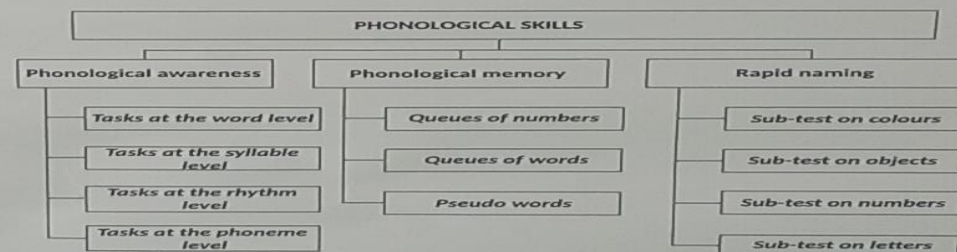


Fig. 1. Structure of assessment of phonological skills

Conclusion

The conducted analysis of the concept allows declaring that before presenting a firm conclusion based on scientific evidence on the question under investigation, it is necessary to accumulate more empirical data. The scientific database should be complemented with national research of phonological skills in children and correlations between phonological and reading skills.

EDA[®] European
Dyslexia
Association

The development of reading

New Tests of Dyslexia and its subtypes

Stanislas Dehaene
Collège de France and INSERM-CEA Cognitive Neuroimaging Unit
NeuroSpin Center, Saclay, France
www.unicog.org

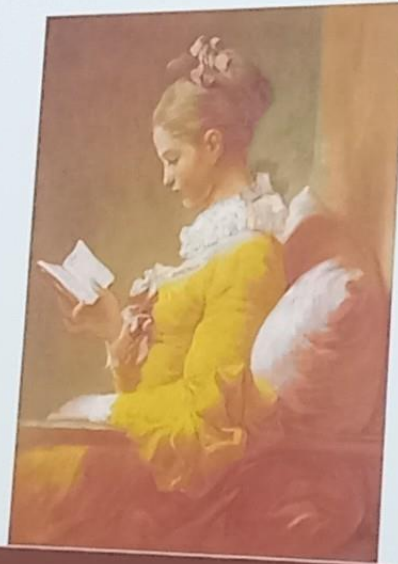
Reading
in the
Brain

THE SCIENCE AND EVOLUTION OF A HUMAN INVENTION



Stanislas Dehaene

AUTHOR OF *THE NUMBER SENSE*



STANISLAS
DEHAENE

Author of *READING IN THE BRAIN*

HOW
WE
LEARN

Why Brains Learn Better
Than Any Machine...for Now

EDA European
Dyslexia

The European Network
of Dyslexia Centres

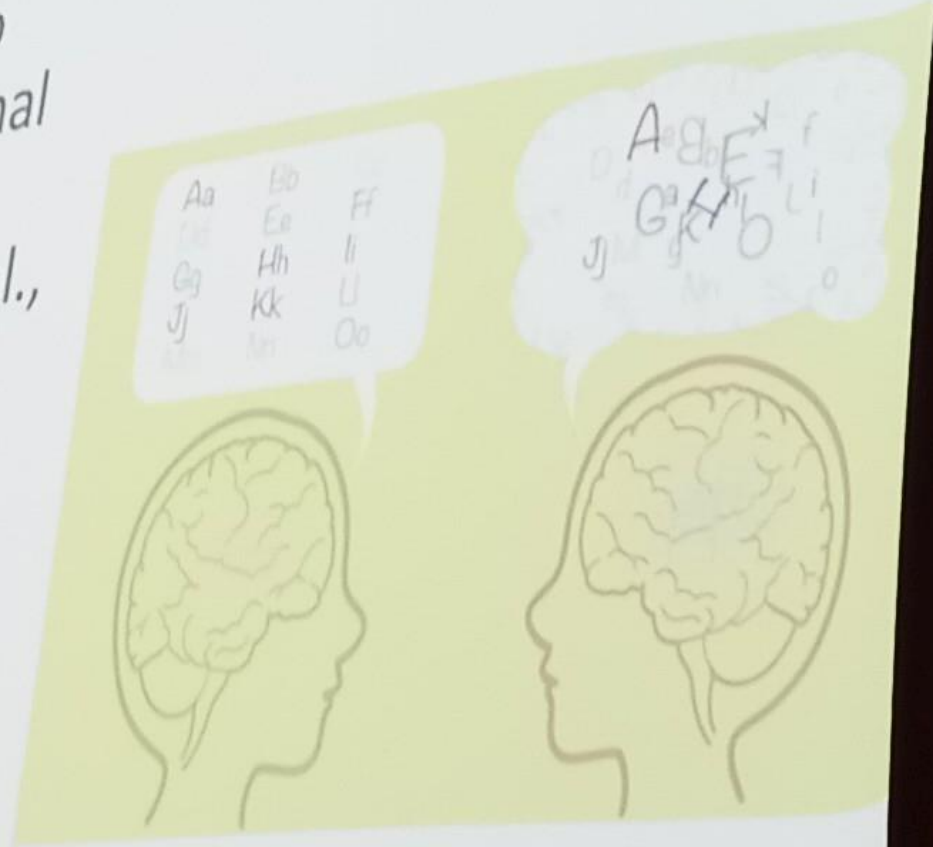
Improving Academic Results and Quality
of Learning in Europe



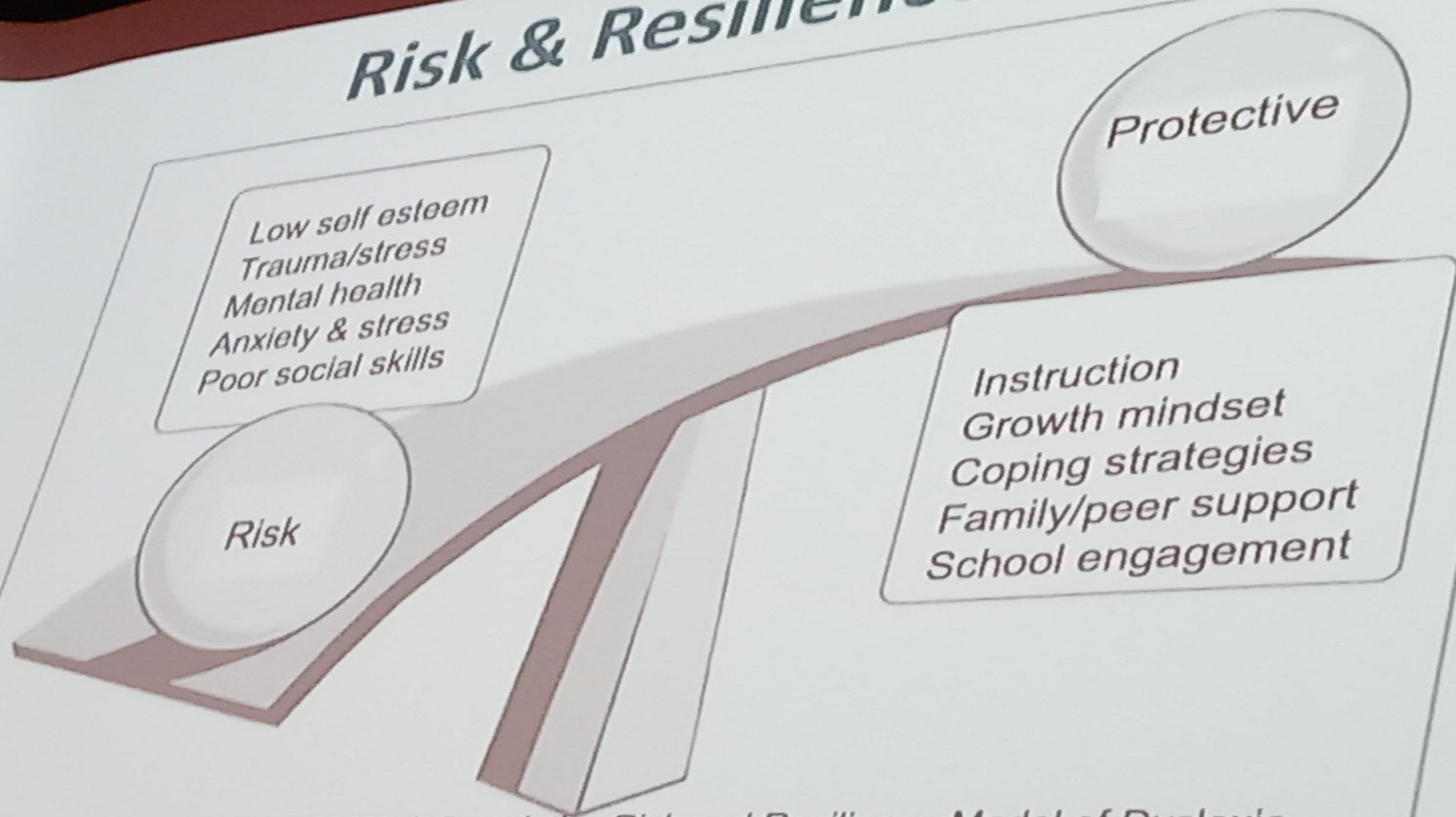
Problem Statement

Children with Specific Learning Disorders (SLD) have been consistently found to present vulnerable social and emotional profiles (Livingston et al., 2018; Mammarella et al., 2016; McArthur et al., 2020).

Poor social and emotional skills → low school engagement, low academic achievement, increased school dropout rates, antisocial behavior and mental health problems (McArthur et al., 2021)



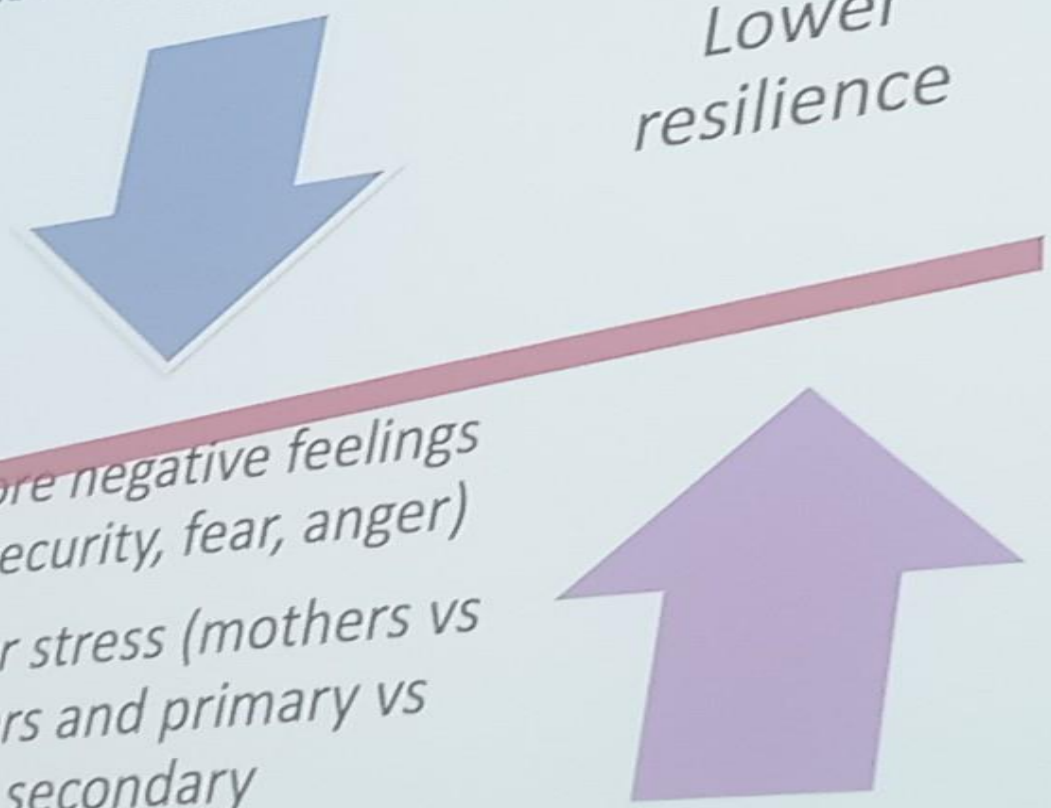
Risk & Resilience model



Adapted from Catts & Petcher, 2022 A Cumulative Risk and Resilience Model of Dyslexia,
Journal of Learning Disabilities

Results: Profiles of parents with LD children

Lower
resilience



More negative feelings
(insecurity, fear, anger)
Higher stress (mothers vs
fathers and primary vs
secondary)

Results: Parental emotions during homework with LD children

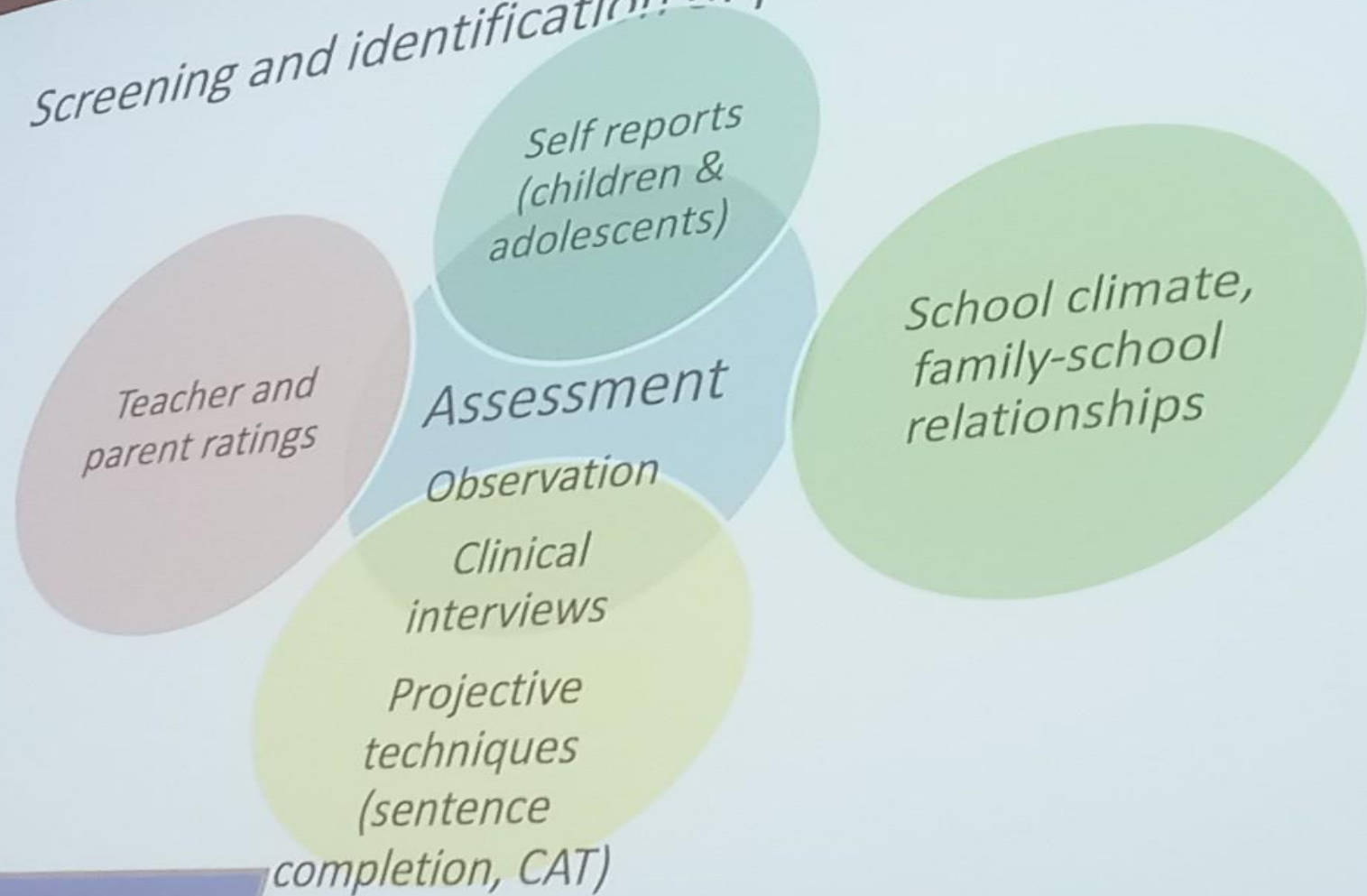


Positivity

Homework stress,
Shame, Guilt,
Negativity
Daydreaming
(avoidance coping)



Screening and identification of psychosocial skills: How ?



Multiple sources of information

Dyslexia Friendly Schools (BDA)

- 4 standards
- Leadership and management
- Teaching and learning
- Classroom environment
- Partnership and liaison with parents, carers etc.



Η έρευνα για την δυσλεξία στην Γαλλία

The development of reading

New Tests of Dyslexia and its subtypes

Stanislas Dehaene

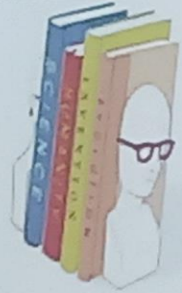
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NeuroSpin Center, Saclay, France

www.unicog.org

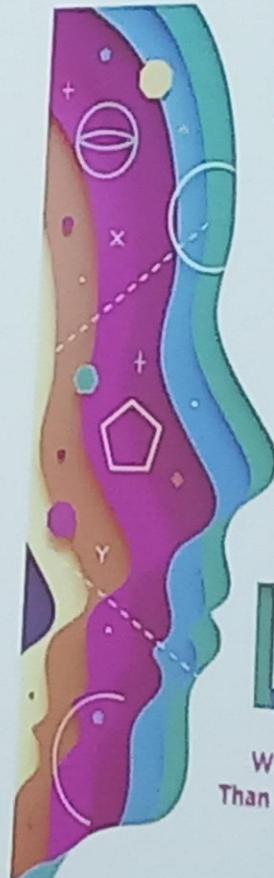
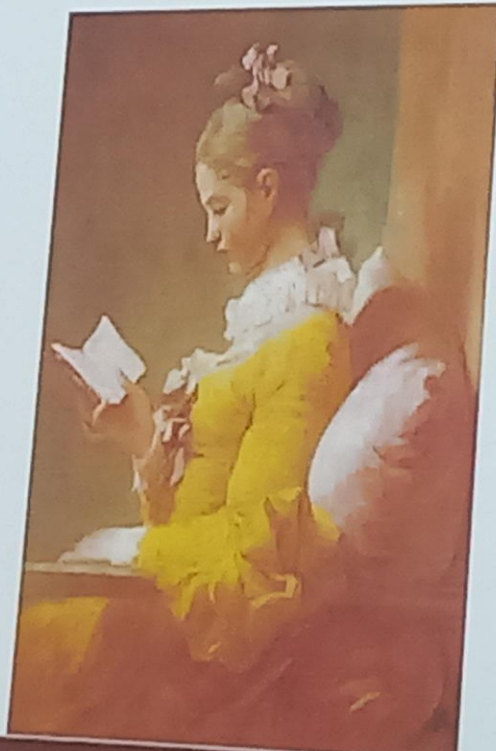
Reading
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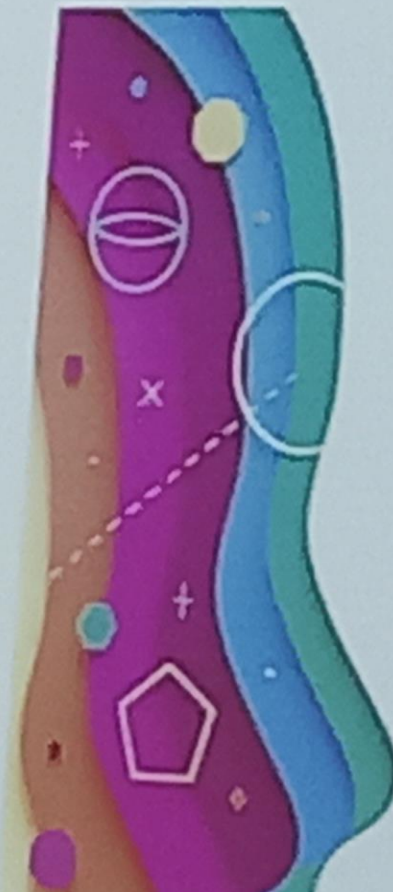
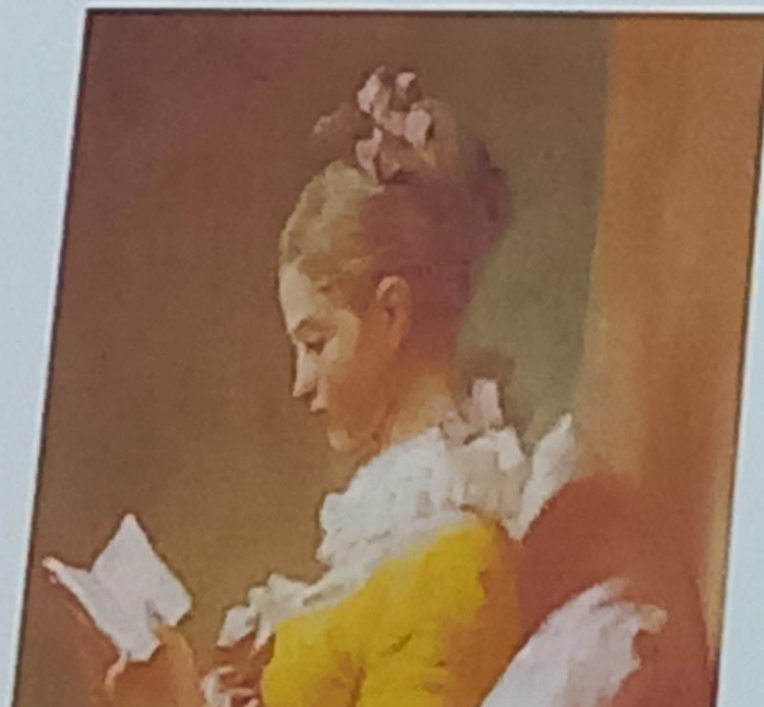
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Reading
in the
Brain

ORIGIN OF A HUMAN INVENTION



STANISLAS
DEHAENE
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HOW
WE

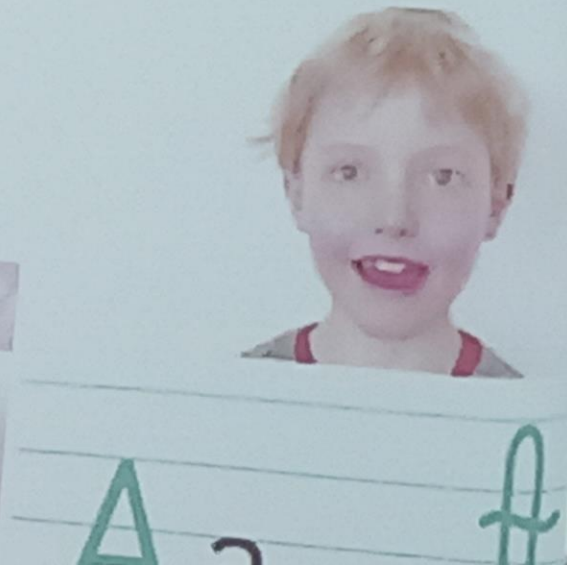
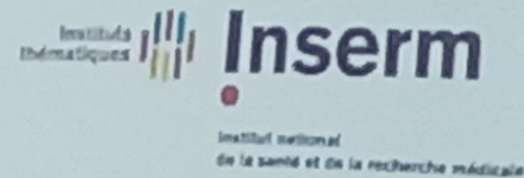
The development of reading

The Kalulu software: Help for reading

Teaching software can implement principles of

- Grapheme-phoneme teaching (phonics)
- With a **systematic progression**
- **Attention and active engagement**
- **Immediate error feedback**
- **Interleaved teaching and testing**
- **Automatization with regular daily rehearsal**

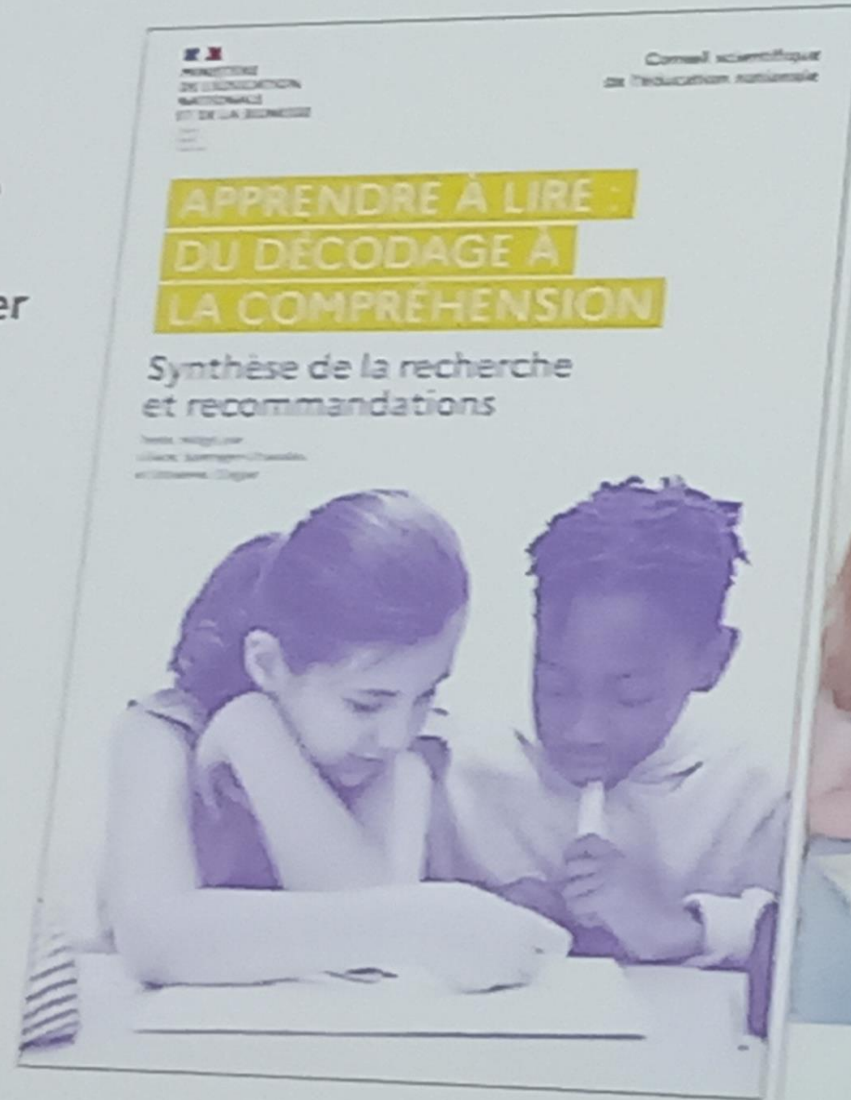
Our open-source « Kalulu » software for reading and math is currently being tested with thousands of children in France, Uruguay, and Brasil.



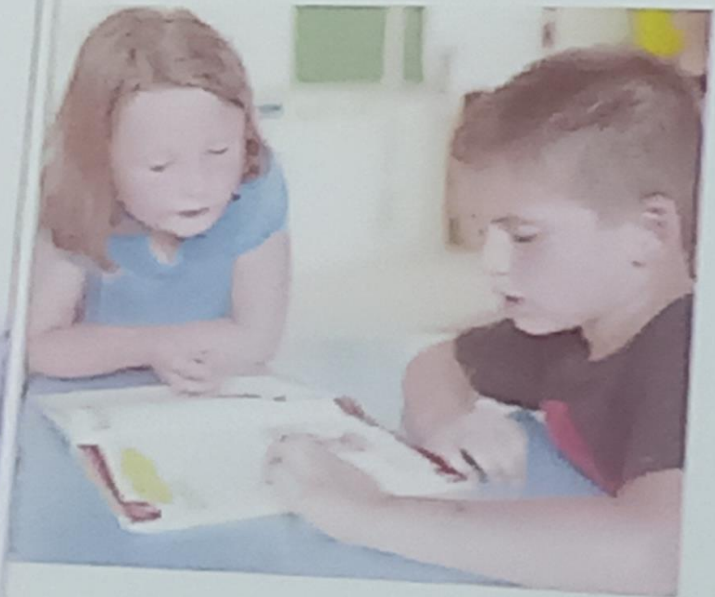
Documents for teachers, trainers, authors and publishers

The Scientific council for education has published some clear guidelines on

- what every 1st grade teacher should know about the Science of Reading
- which manuals work best



TEACHING METHODS AND MANUALS FOR LEARNING TO READ : HOW TO CHOOSE ?



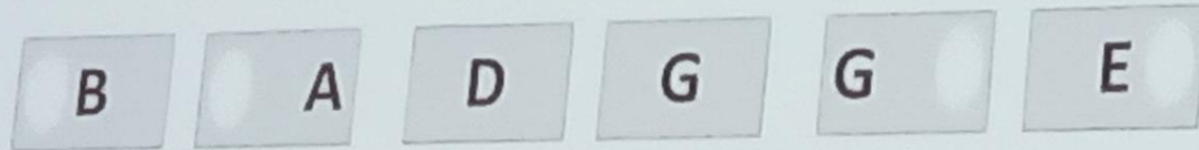
Analyses conducted in 2018-2019

Predictions of our model for orthographic-level dyslexias

Each word is encoded by **letter and space bigrams** units, a factorized representation of letters and their approximate position

Example: **BADGE** =

Predictions for errors?



1. Errors may arise from an **insufficiently precise coding of letter position**

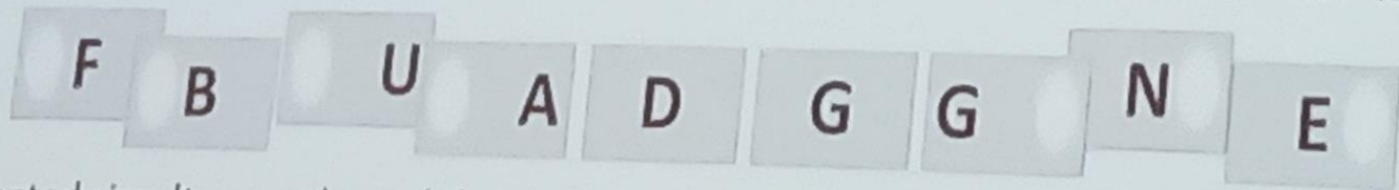
→ **Letter transposition effect**: Normal readers can read stimuli such as CMABRIGDE or BAGDE, and are primed by them.

→ **Letter position dyslexia**: if the letter-position units are too scarce or their position code is too fuzzy.

e.g. reading "form" as "from"

2. Errors may arise from the **mixing of different words** (inappropriate word selection or letter-to-word binding)

FUN BADGE

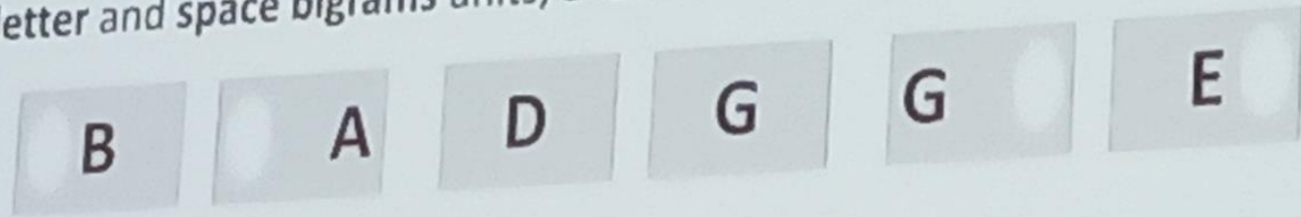


If two words are presented simultaneously, and if attentional selection is insufficient, their codes may be mixed.

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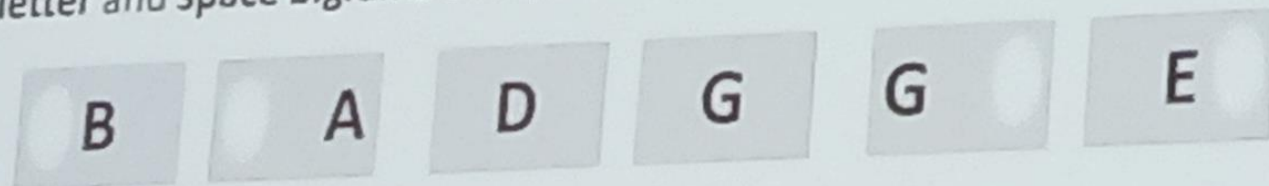
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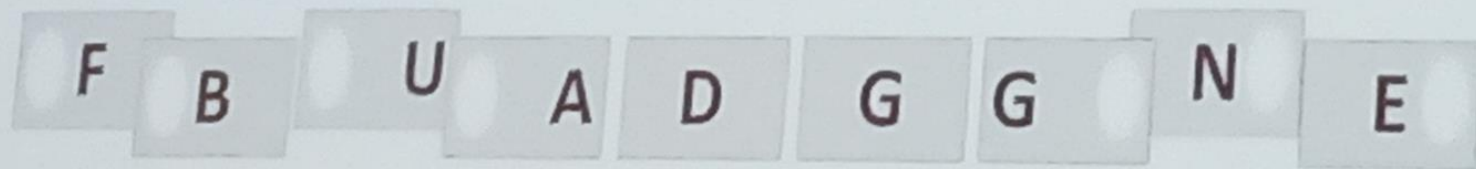
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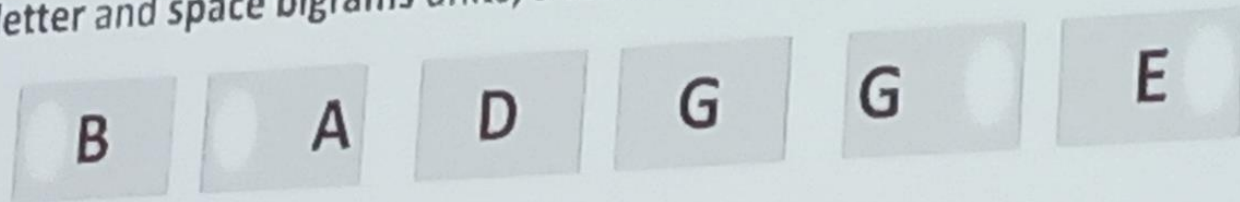
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→ **Illusory conjunctions in normals** (Treisman & Southern, 1986)

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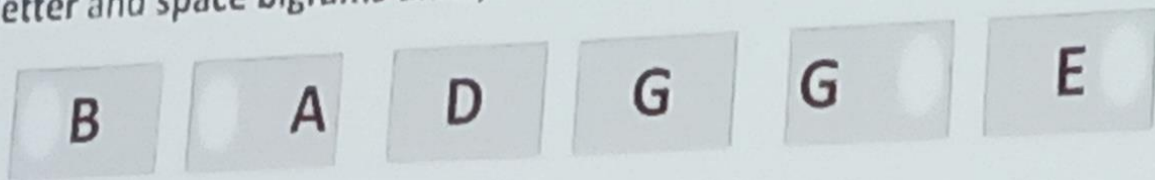
→ **Attentional dyslexia** (Shallice & Warrington 1977; Friedmann et al. 2010)

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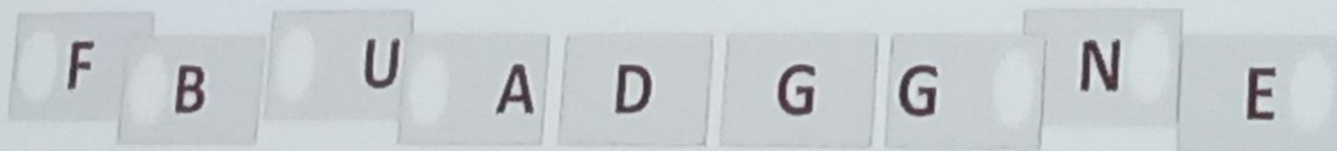
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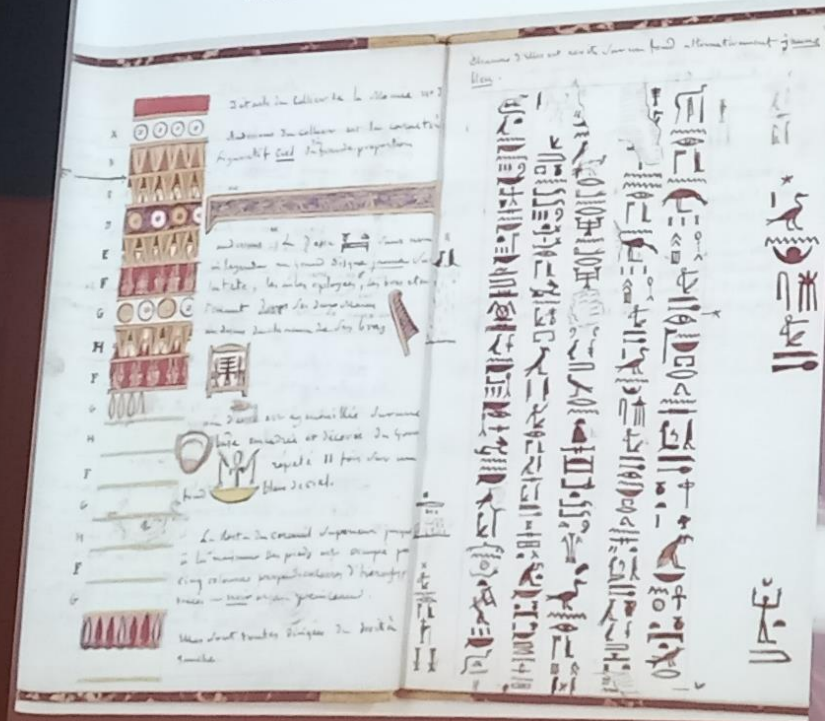
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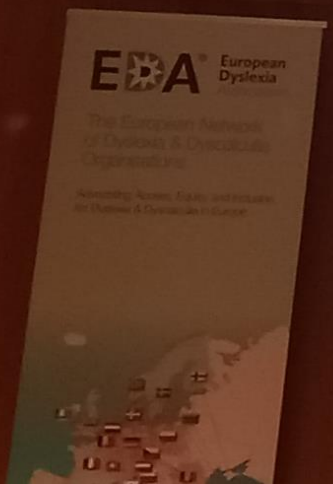
e.g. reading "win fed" as "fin fed"

Part 4. Tools to improve reading acquisition for all children

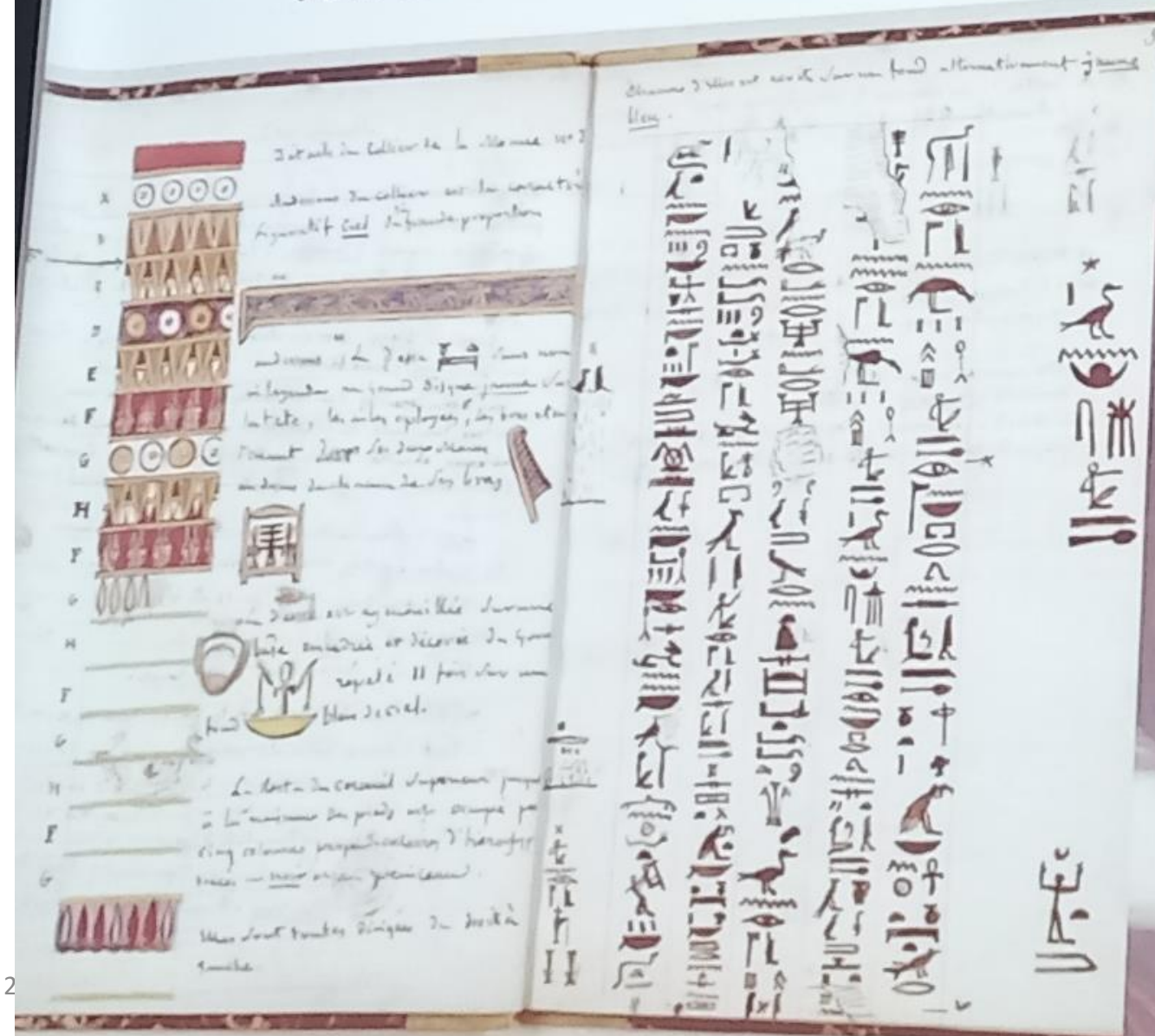


EDA European Dyslexia

The European Network of Dyslexia & Orthographic Organizations
Advocating, Assisting, Educating and Raising Awareness for Dyslexia & Orthographic in Europe



Part 4. Tools to improve reading acquisition for all children





READING PREDICTORS IN PRESCHOOL CHILDREN:

A DIDACTIC INTERVENTION ON PHONOLOGICAL AWARENESS

European Dyslexia Association Conference, Athens, 18-20/10/24

Sara Cavaglia, Chiara Melloni, Maria Vender

sara.cavaglia@univr.it - chiara.melloni@univr.it - maria.vender@univr.it

Università di Verona

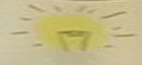


THEORETICAL BACKGROUND

Growing interest in **bilingualism and language disorders** intervention
Wimmer et al 2019, Varnhagen 2020, 2022

Issues with the correct diagnosis of reading impairment in the bilingual population
Wimmer et al 2019

Risk of over or under-diagnosis
Wimmer & Nelson 2020, Torgu et al 2022



Investigation of **phonological awareness** skills to correctly identify children at risk at earlier stages

RESEARCH QUESTION

What is the effectiveness of a didactic intervention focused on **phonological awareness**?



PARTICIPANTS

44 children with Italian as L1

33 children with Italian as L2

Mean age 5.9

Third year of kindergarten



METHODS

Pre-test on phonological skills: **nonword repetition, rhyme detection and phoneme blending**, plus other reading predictors

9-hour **didactic intervention** on phonological awareness: **group games** on words, syllables and phonemes and **gradual identification** of smaller sublexical units

Post-test on phonological skills

In primary school: **test on reading skills**

RESULTS

Linear regression model on **RA**
 Significant improvement in **phoneme blending** for the whole experimental group ($\beta = 0.026$) and in **nonword repetition** for the L2 experimental group ($\beta = 0.026$), but not in **rhyme detection**



Group	NONWORD REPEITION		RHYME DETECTION		PHONEME BLENDED	
	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Experimental group	1.5	2.5	1.5	2.5	1.5	2.5
Control group	1.5	1.5	1.5	1.5	1.5	1.5

CONCLUSION

Didactic intervention on phonological skills can be **effective** tools to enhance sublexical abilities, even before literacy acquisition

Fragile populations (with as L2) benefit from didactic interventions from this kind of activities
 Tests on reading skills will allow us to verify the long term effect of the learning

DETAILS AND REFERENCES



Η έρευνα για την δυσλεξία στην Γερμανία

Interactive plot of the number of data entries yielding specific subtypes per theoretical model. When you hover over a cell, the model, and the corresponding number of data entries in the dataset. When you click the cell, the corresponding paper(s) will be displayed.

No. of Data Entries Yielding Specific Subtypes Per Theoretical Model

- Late-emerging comprehension and word recognition difficulties - Phoneme-awareness-RAN-visual-attention-deficit -
- Late-emerging comprehension difficulties (LERD-C) - Poor-vocabulary-phonological-awareness-deficit -
- Phonological-awareness-RAN-phonological-memory-deficit - RAN-visual-attention-deficit -
- Late-emerging word reading difficulties (LERD-W) - RAN-Phonological-memory-deficit -
- Mild morphological-production-deficit - Poor reading-comprehender-decoder -
- ADD readers without any phonological processing deficit -
- Early-emerging comprehension and word recognition difficulties (ERD-CW) - Phonological output lexicon surface dyslexia -
- Phonological-blending-RAN-deficit -
- Phonological-awareness-phonological-memory-deficit - Working-memory subtype 4 -
- Phoneme-awareness-visual-attention-deficit -
- Severe RAN-deficit with mild morphological-production-deficit - Phonological-visual-attention-deficit -
- Average word readers-poor comprehenders -

Challenges & Outlook

- Definitional issues + small sample sizes + task-level, participant-level & contextual heterogeneity → Multiverse of methods
- Multiverse analysis: Delineate the sources of heterogeneity

Contact: Anna Leung

Yi.Leung@med.uni-muenchen.de

DFG
Deutsche
Forschungsgemeinschaft

meta
rep

Carl von Ossietzky
Universität
Oldenburg

LMU KLINIKUM

Shiny App:

<https://dyslexiaproject.shinyapps.io/profilingdyslexia/>



Explore Heterogeneity Using Multiverse Analysis

Recruit DD (+ TD)

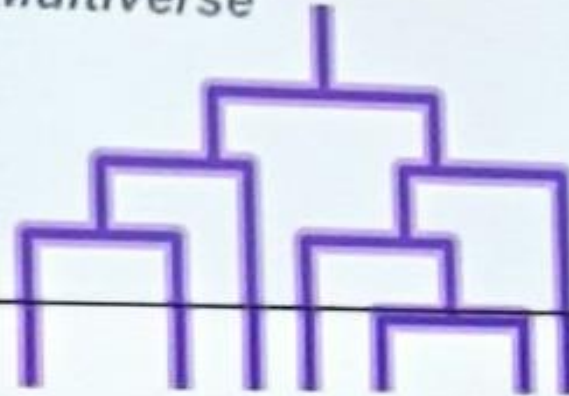
Administer cognitive tests
(+ neurological tests)

Compare test scores
using statistical methods

Identify distinct profiles
based on test score
differences

Check % of each subtype

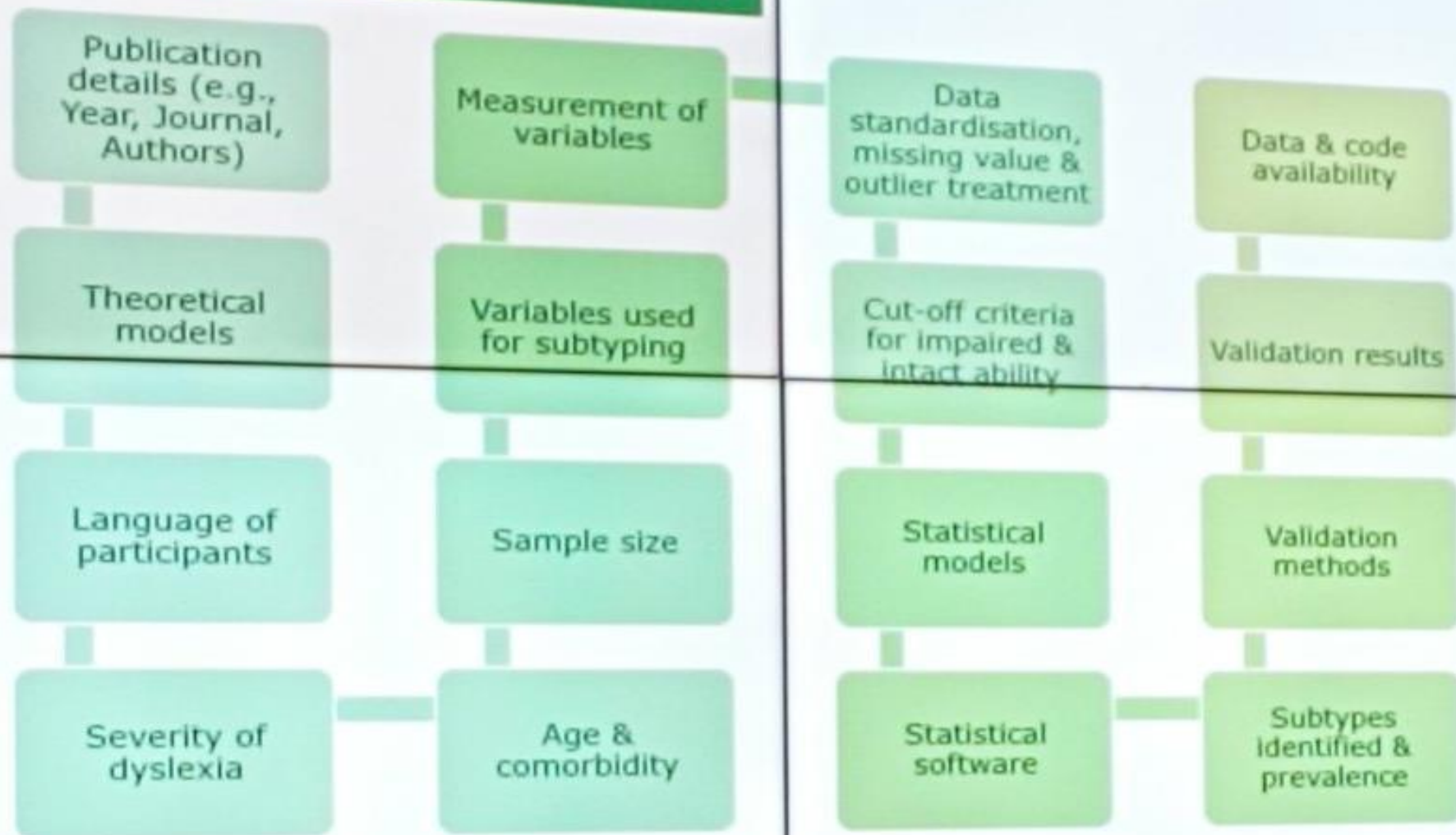
Multiverse



Aims of multiverse analysis:

1. To map out all decision steps, options & results
2. To examine whether & how arbitrary choices in the analytical pathways explain the heterogeneity in results

What's Inside the Dataset?



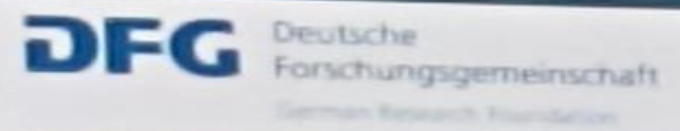
Interactive Shiny App

Records screened
($n = 2167$)
Reports included
($n = 259$)

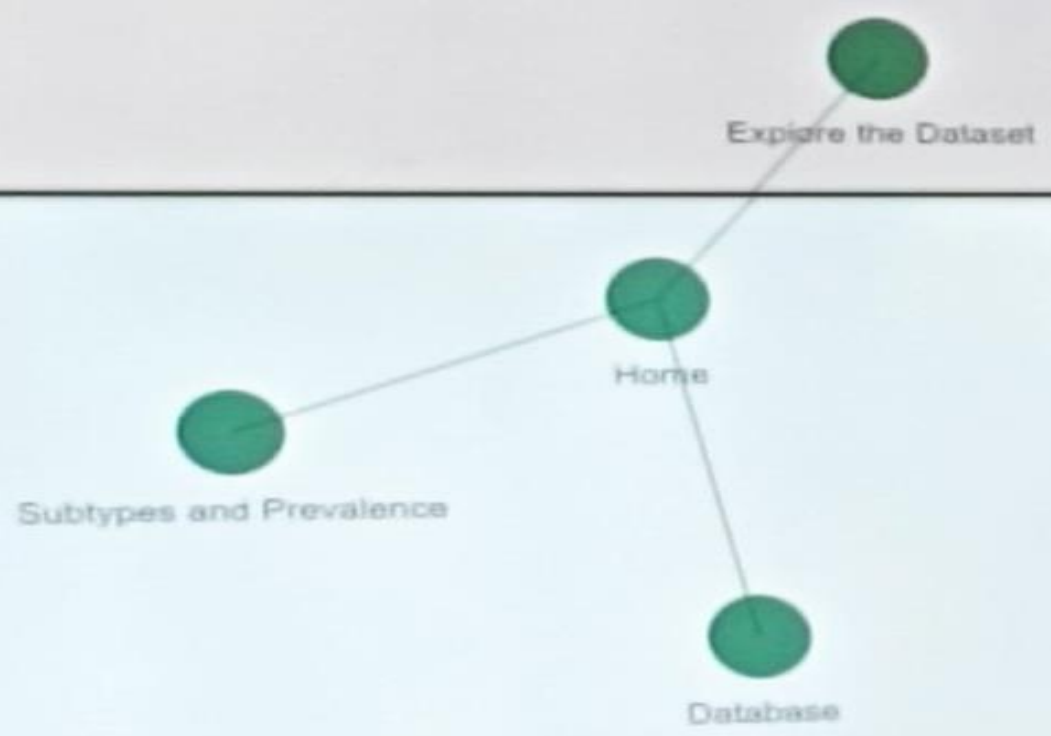
Demo Version:
(Papers: 2014–2023)

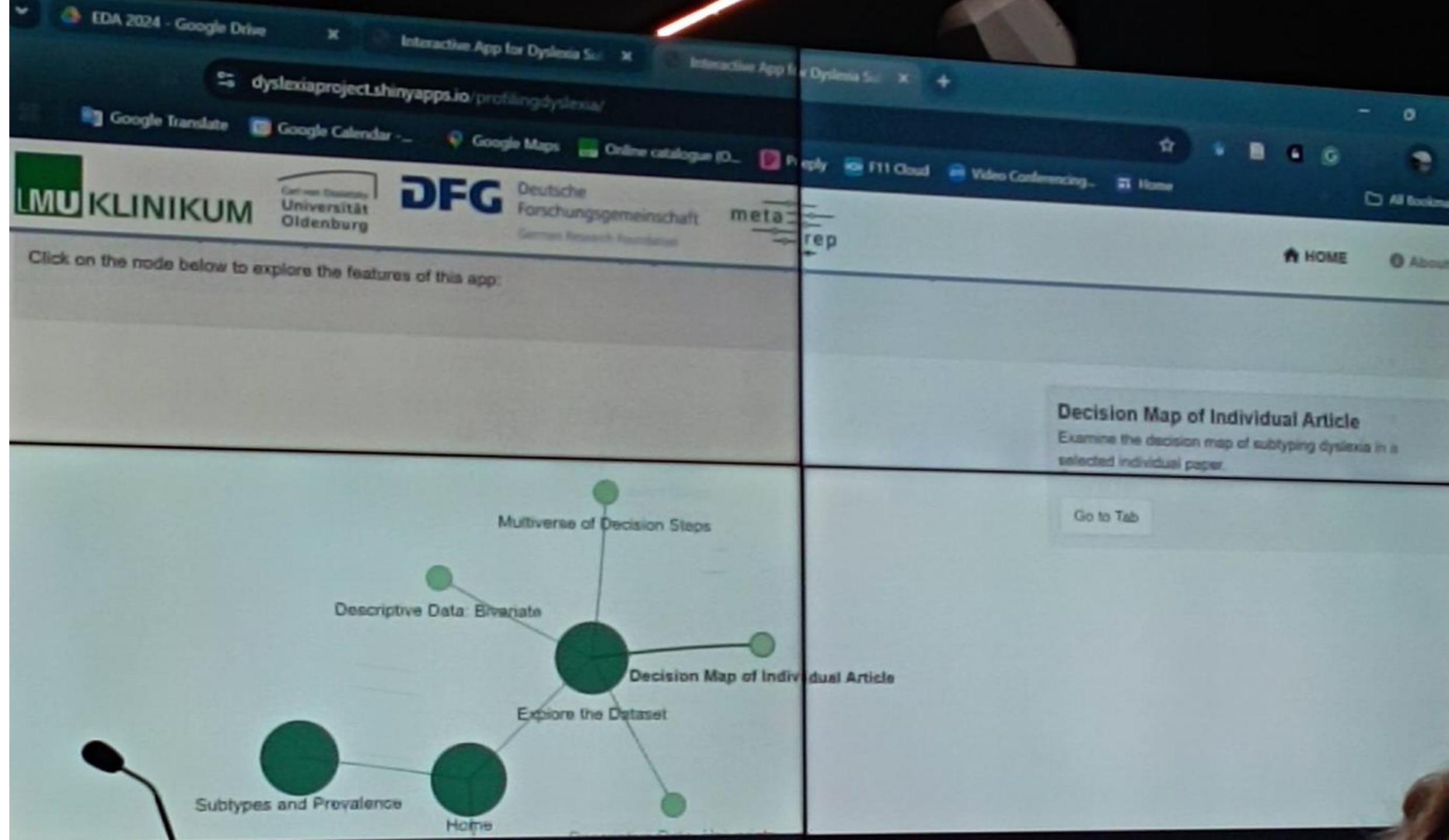
<https://dyslexiaproj.github.io/shinyapps.io/profileingdyslexia/>





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dyslexiaproject.shinyapps.io/profilingdyslexia/

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German Research Foundation

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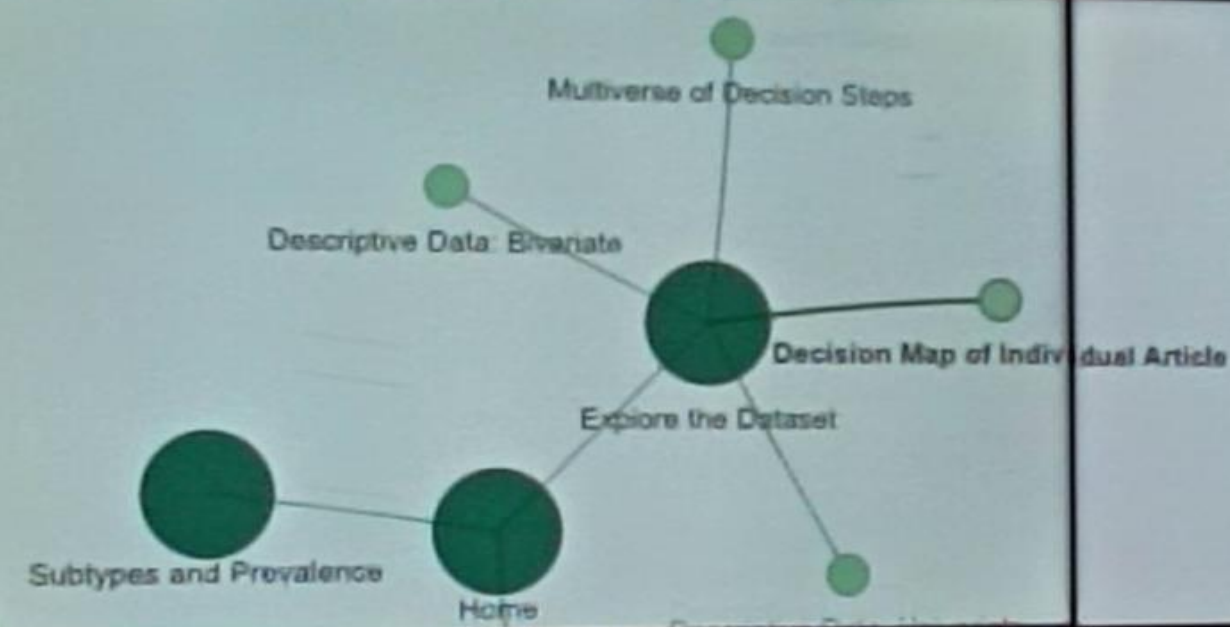
HOME About

Click on the node below to explore the features of this app:

Decision Map of Individual Article

Examine the decision map of subtyping dyslexia in a selected individual paper.

Go to Tab



PRISMA Diagram

List of Included Articles

List of Variables

Create Your Table

Systematic literature review of articles that conducted the subtyping of developmental dyslexia.

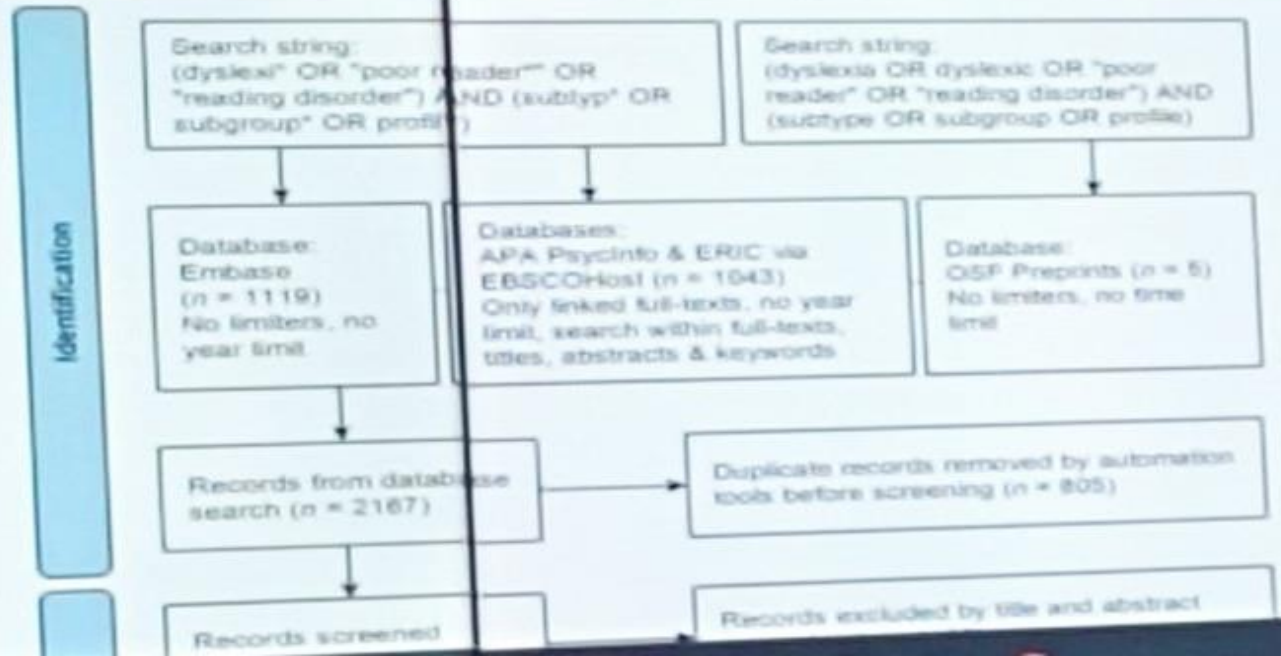
Prisma Diagram

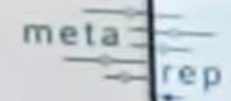
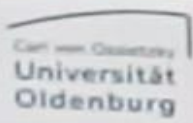
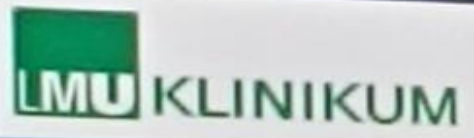
Literature search: We used four databases (Embase, APA PsycInfo, ERIC, OSF Preprints) to search for empirical papers that conducted the subtyping of developmental dyslexia.

Inclusion criteria: We included empirical studies that identified the cognitive profiles, subtypes, or subgroups of readers with reading difficulty. The items were screened by two coders independently, where the primary coder (Coder 1) screened all items, whereas the subordinate coder (Coder 2) screened 20% of randomly selected items for reliability check.

Data extraction: All data related to the publications' details were coded by one coder. The remaining data related to the subtyping details were coded by another coder.

Identification of studies via databases





- PRISMA Diagram
- List of Included Articles
- List of Variables
- Create Your Table

Below is an overview of all the variables available in our dataset.

	Name_or	Name_vis	Description	Data_type	Group
	<input type="text" value="All"/>	<input type="text" value="All"/>	<input type="text" value="All"/>	<input type="text" value="All"/>	<input type="text" value="All"/>
1	Item_No	Paper ID	The ID number assigned to the paper.	Character	Publicati
2	Entry_No	Entry No.	The ID assigned to each of the data entry of the paper.	Character	Publicati
3	Paper	Paper	The label assigned to the paper.	Character	Publicati
4	Title	Paper title	The title of the paper.	Character	Publicati
5	Journal	Journal	The journal in which the paper was published.	Categorical_L	Publicati

Descriptive Data: Univariate

Descriptive Data: Bivariate

Multiverse of Decision Steps

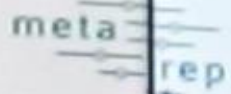
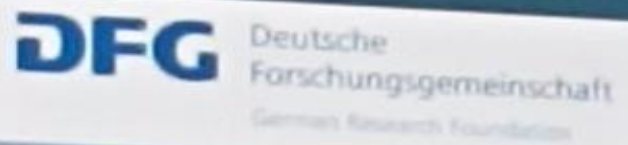
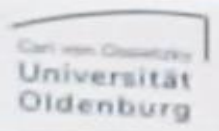
In this tab, you may explore the descriptive data of each of the variable in our dataset. First, select the variable categories of your interest, then select a variable in the dropdown list. The frequency distribution plots will be displayed on the right.

Select the variable categories to filter the available variables:

Select Variable Categories:

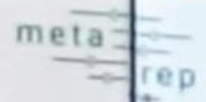
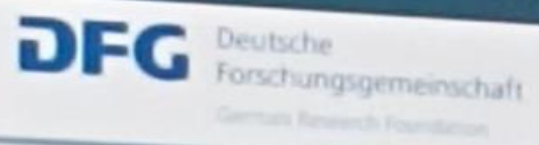
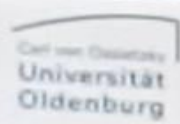
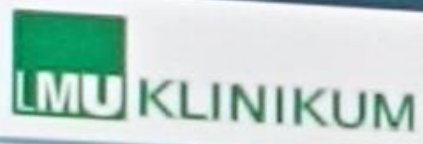
- Publication
- Variation in Sample
- Variation in Measure
- Variation in Method
- Variation in Outcome

Select variable from the dropdown list:



K
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- Journal of Communication Disorders
- Research in Developmental Disabilities
- NeuroImage: Clinical
- American Journal of Speech-Language Pathology (AJSLP)
- Brain Structure and Function
- Frontiers in Human Neuroscience
- Medical Science Monitor
- PLOS ONE
- Scientific Studies of Reading
- International Journal of Instruction
- Frontiers in Psychology
- Reading and Writing: An Interdisciplinary Journal
- Journal of Research in Reading
- Reading Psychology
- Learning Disability Quarterly



Descriptive Data: Univariate

Descriptive Data: Bivariate

Multiverse of Decision Steps

Decision Map of Individual Article

In this tab, you may explore the descriptive data of each of the variable in our dataset. First, select the variable categories of your interest, then select a variable in the dropdown list. The frequency distribution plots will be displayed on the right.

Select the variable categories to filter the available variables:

Select Variable Categories:

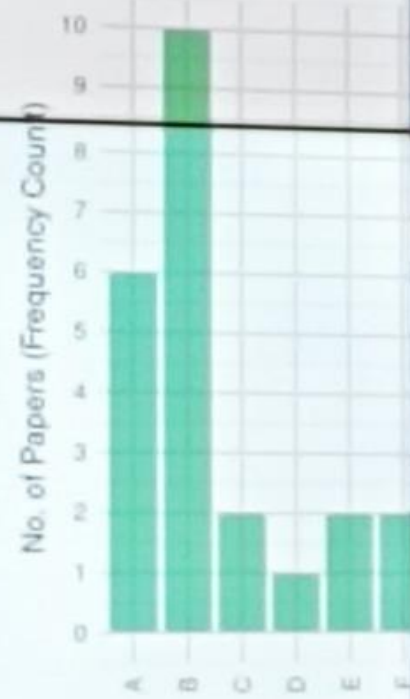
- Publication
- Variation in Sample
- Variation in Measure
- Variation in Method
- Variation in Outcome

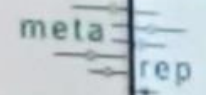
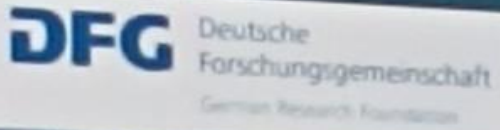
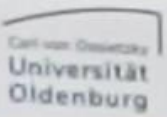
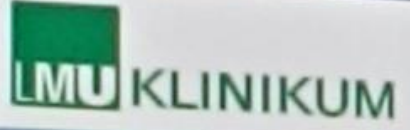
Select variable from the dropdown list:

Select Variable:

Journal

Bar Plot of Journal





HOME About

In this tab, you may explore the frequency distribution between two of your selected variables from our dataset. First, select the variable categories of your interest, then select a variable from each dropdown list. A bivariate frequency distribution table will be displayed on the left. The values of Variable 1 will be displayed row-wise, whereas the variables of Variable 2 will be displayed column-wise.

Select Variable Category 1:

Publication

Select Variable 1 (Row):

Journal

Select Variable Category 2:

Publication

Select Variable 2 (Column):

Journal

American Journal of Speech-Language Pathology (AJSLP)

Annals of Dyslexia

Brain Sciences

Brain Structure and Function

Child Neuropsychology:

	Annals of Dyslexia	Brain Sciences	Brain Structure and Function	Childhood and Adolescence	Clinical Linguistics & Phonetics	Journal of Devoted to the Study of the Nervous System and Behavior
American Journal of Speech-Language Pathology (AJSLP)	3	0	0	0	0	0
Annals of Dyslexia	0	8	0	0	0	0
Brain Sciences	0	0	1	0	0	0
Brain Structure and Function	0	0	0	1	0	0
Child Neuropsychology:	0	0	0	0	2	0

Variation in Sample

Select a variable from the dropdown list:

Select Variable:

Language of subtypes

Select Option:

English

Add Selection

Variable	Option	Mode
Language of subtypes	English	Select Value

Delete Last Row

ID	Author	Title	Journal	Year
3 ID32_02	Hamilton_2019	Diagnostic implications of the double deficit model for young adolescents with dyslexia	Dyslexia: An International Journal of Research and Practice	2019
4 ID59_01	Sleeman_2022	The identification and classification of struggling readers based on the simple view of reading	Dyslexia: An International Journal of Research and Practice	2022
5 ID59_02	Sleeman_2022	The identification and classification of struggling readers based on the simple view of reading	Dyslexia: An International Journal of Research and Practice	2022

The list of paper(s) that had reported your chosen variable and option will be displayed on the right. You may repeat the above steps to add more variables and options to the list and filter the papers that undertook your chosen combination of options. Click "Delete Last Row" if you wish to remove the last added variable and option from the combination.

Select the **variable categories** to filter the available variables.

Select Variable Category:

Variation in Method

Select a **variable** from the dropdown list:

Select Variable:

Theoretical model(s)

Select Option:

Double deficit model/Double-deficit hypothesis

Add Selection

32_02 Harrison_2019

Diagnostic implications of the double deficit model for young adolescents with dyslexia
Dyslexia: An International Journal of Research and Practice

2019 10.100

_125_01 Arnold_2021

Profiling the word reading abilities of school-age children with neurofibromatosis type 1

Journal of the International Neuropsychological Society

Arnold, S. S., Payne, J. M., McArthur, G., North, K. N., & Barton, B.

2021 10.10

_135_02 Peters_2020

Flicker fusion thresholds as a clinical identifier of a magnocellular-deficit dyslexic subgroup

Scientific Reports

Peters, J. L., Bavin, E. L., Brown, A., Creather, D. P., & Creather

2020 10.10

Κυριακή, 20 Οκτωβρίου 2024

Σας επισυνάπτω βίντεο από τις διαλέξεις

https://www.dropbox.com/scl/fi/qx7ocg23x1ka3ngdd4d07/20241018_163435.mp4?rlkey=g8t5z22subgafad3yy721rjua&st=k81qy1kt&dl=0

https://www.dropbox.com/scl/fi/qx7ocg23x1ka3ngdd4d07/20241018_163435.mp4?rlkey=g8t5z22subgafad3yy721rjua&st=3oji240g&dl=0

https://www.dropbox.com/scl/fi/31jl9ceone9xq0me5o6dv/20241018_164907.mp4?rlkey=ecgyua7glhtd23du30hfannxi&st=6clkz0xc&dl=0

https://www.dropbox.com/scl/fi/johwgt dh6sq17tyl3qbf3/20241018_170159.mp4?rlkey=s3ro73j3jmc9simjhy6anpzj9&st=65ipm7gs&dl=0

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Μαρία Δροσινού