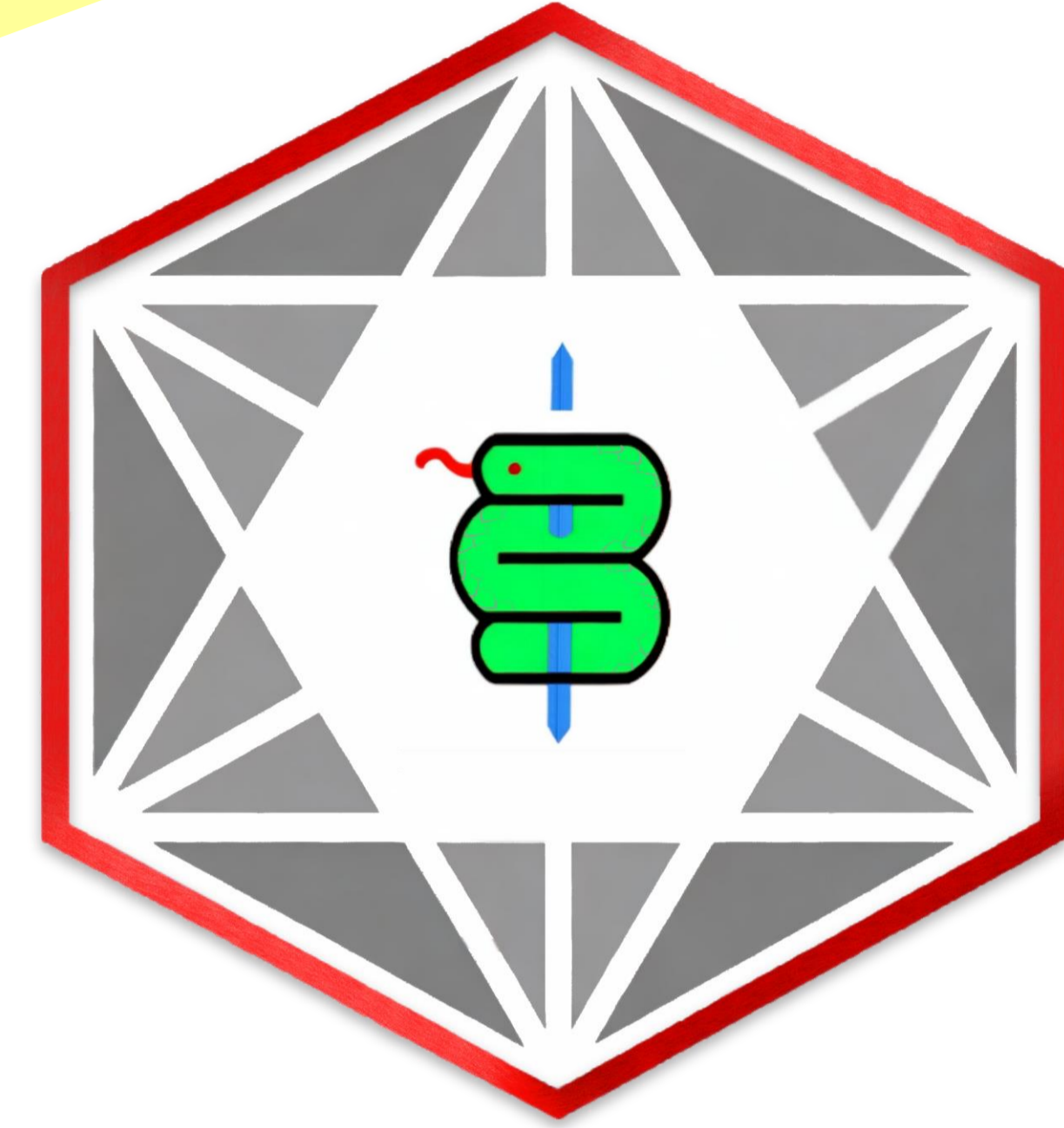




# Development of a Thai-language Lexical Decision Task

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## Background

- Lexical decision tasks, such as the English-language Spot-the-Word Test<sup>1</sup>, are often used as estimators of premorbid function for neuropsychological assessment.
- This is because performance is usually little impaired by neurological disease, or normal ageing, yet correlates very highly with general cognitive ability.
- No such task is currently available in Thai.
- In this research, we have begun to develop a Thai version.
- The task involves identifying the real word in pairs that contain one pseudoword.

## Results

- There was no ceiling effect: only one of the 818 participants scored 100%.
- This full 100 item task had acceptable internal consistency: KR20 = .78
- No sex effect (male mean = 86.1, female mean = 86.8, *ns*).
- There was no decline in performance with age.
- In fact, scores improved slightly with increasing age.

## Methods

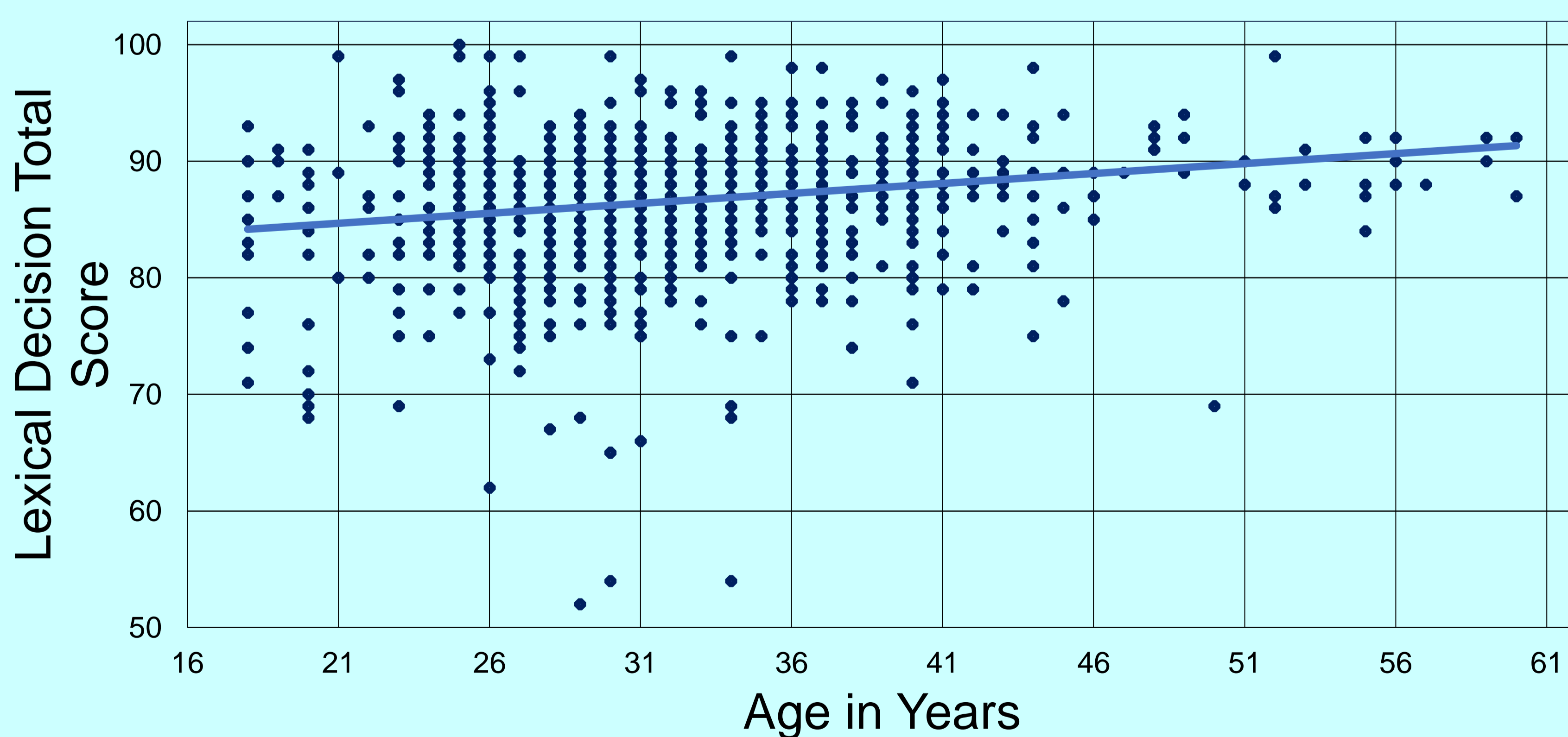
- The new task is comprised of 100 real, mainly low-frequency, Thai words, and 100 pseudowords.
- Online data collection (Qualtrics).
- 818 adult Thai speakers, screened for neurological illness, completed the task.
- Mean age = 33 (range 18 – 60).
- Mainly women, *n* = 530 (65%).

|          |   |         |
|----------|---|---------|
| slank    | – | chariot |
| lentil   | – | glotex  |
| stamen   | – | dombus  |
| loba     | – | comet   |
| pylon    | – | stroin  |
| scrapten | – | flannel |

Example items from the English Spot-the-Word Test<sup>1</sup>. Full test has 60 items.

|        |   |            |
|--------|---|------------|
| ชมอน   | – | สี่        |
| ภฤงคาร | – | ภาคเตย์    |
| นาคี   | – | โพธิจักร   |
| ราโนย  | – | กาฬพิภักซ์ |
| เชบ์ต  | – | ปลู่วัลย์  |
| จวัก   | – | คเมช       |

Examples from our Thai Lexical Decision Task. Full test, at this stage, has 100 items.



Correlation of Lexical Task Performance with Age ( $r = .20, p < .001$ ). Regression line also shown.

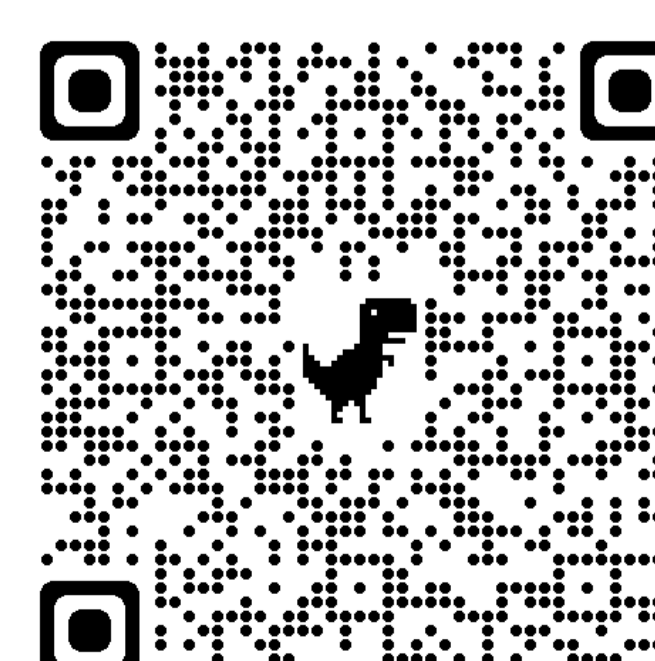
## Discussion

- This new Thai Lexical Decision Task has acceptable psychometric properties.
- The task shows no sex-based effect but a positive correlation with age.
- This is the same pattern as for the English-language Spot-the-Word test.
- This suggests that, like the Spot-the-Word test, it likely holds in the presence of cognitive decline / disorder.
- We are further developing this test as an estimator of premorbid cognitive ability.

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## Reference

<sup>1</sup> Baddeley, A. et al., (1993). The Spot-the-Word test: A robust estimate of verbal intelligence based on lexical decision. *British Journal of Clinical Psychology*, 32(1), 55-65.



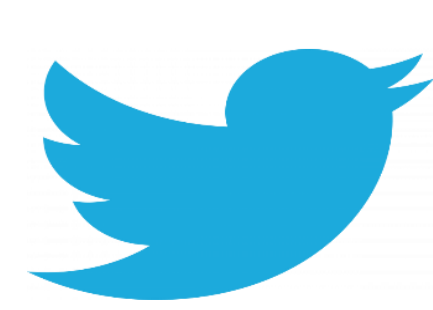
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