

What is the association between emotional resilience and reading proficiency?



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Background

- University students with dyslexia have lower emotional resilience [1].
- Could resilience enable individuals with dyslexia to persevere with their reading goals?
- For children with reading disorders, emotional resilience is a protective factor alleviating some of the reading disorder symptoms [2].
- This is also important for a wider population that do not require phonological training but need other methods to develop their reading ability.

Question: Is resilience linked to reading proficiency in typical readers?

Aim & hypothesis

- Aim:** To examine the relationship between emotional resilience, social competence, and family coherence on reading proficiency among university students.
- Hypothesis:** There will be a significant relationship between emotional resilience and reading proficiency. This could be driven by social competence and family coherence.
- Implications:** Emotional resilience interventions could be included in reading programs.

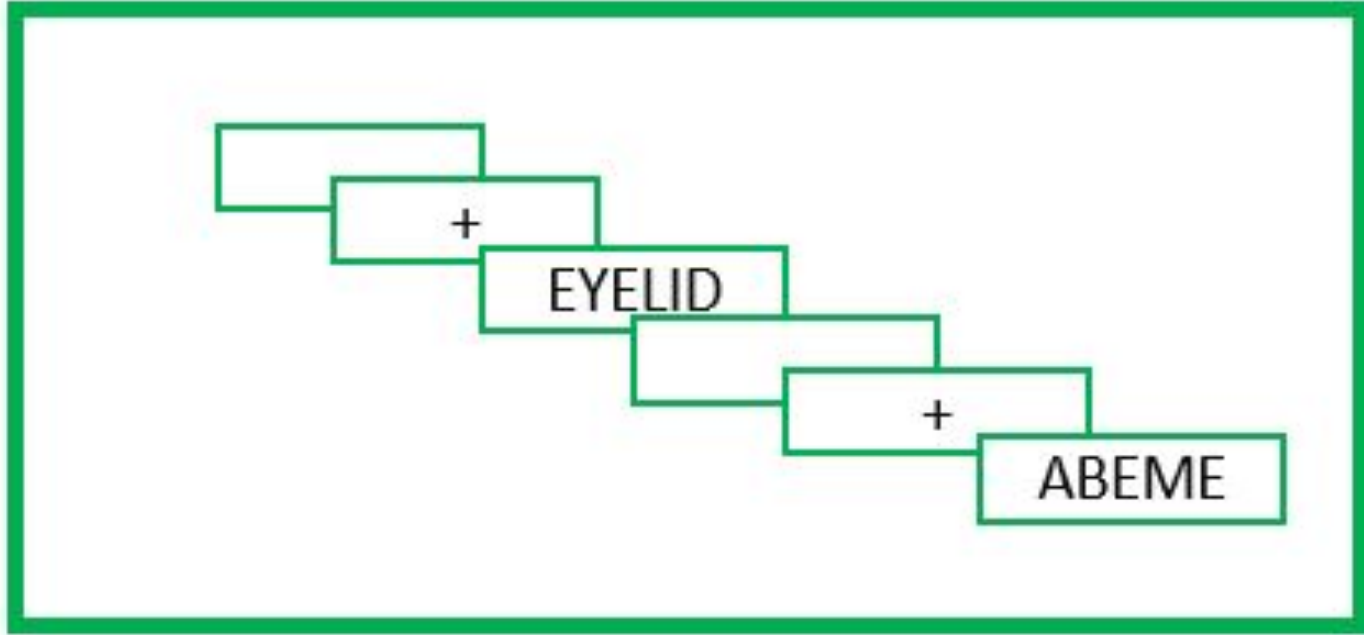
Methods

**Participants:** 50 psychology students (Age:  $M = 20.48$ ,  $SD = 2.40$ ; Gender: 7 male) completed:

- Lexical Decision Task – **LDT** [3].
- Academic Resilience Scale (**ARS-30**) [4].
- Resilience Scale for Adults (**RSA-37**) [5].
- Social competence.
- Family coherence.

Procedure:

LDT



5 blocks x 100 trials, 30 min



ARS-30  
RSA-37

Within-subjects design:

Multiple regression:

- Response variable: Efficiency of words and pseudowords (RT divided by ACCURACY [6]).
- Predictor variable: Emotional resilience (covariates: age, social competence, family coherence).

Mediation analysis:

- Social competence.
- Family coherence.

Results

Multiple Regression

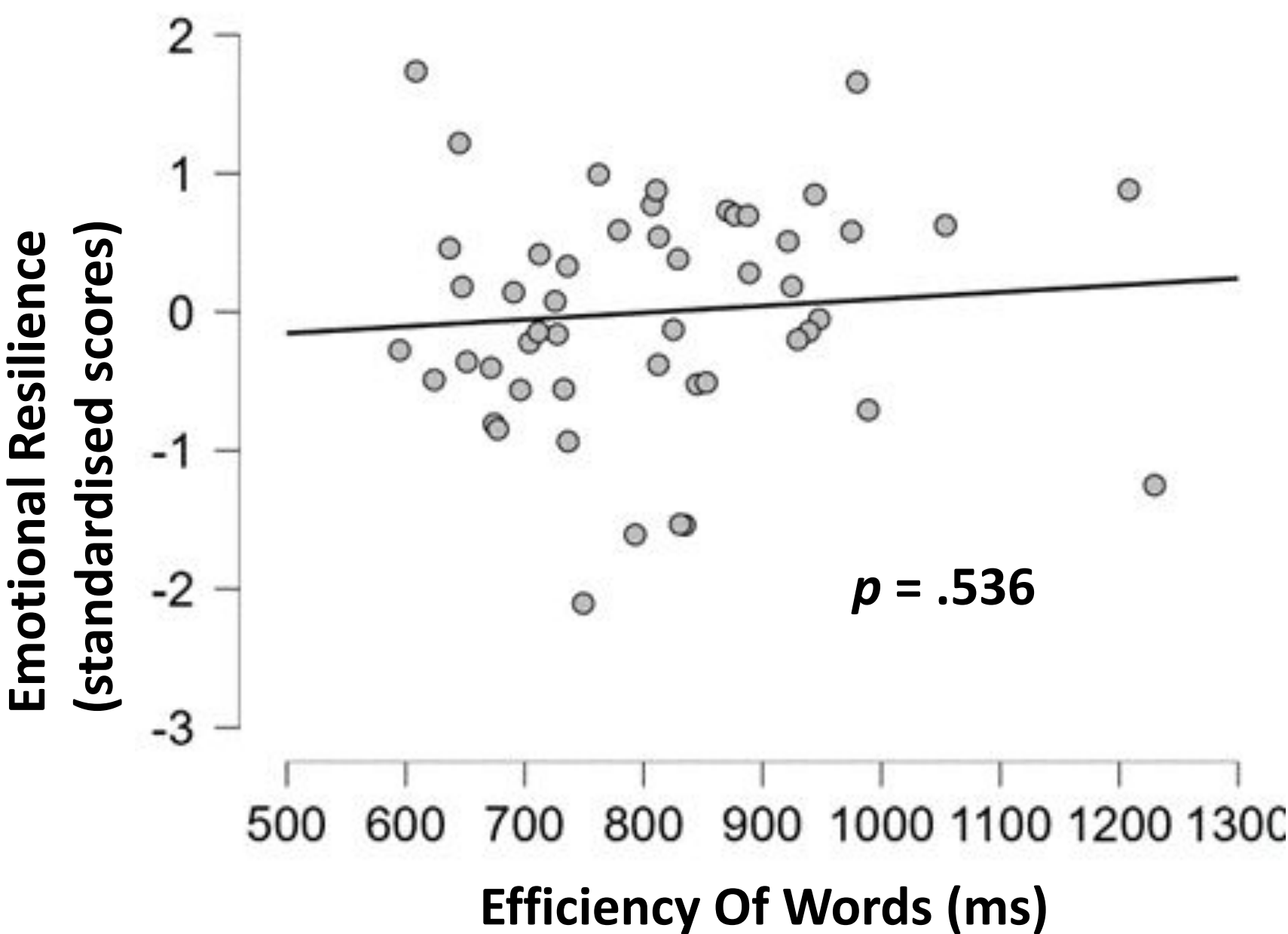


Figure 1. Relationship between emotional resilience and efficiency of words.

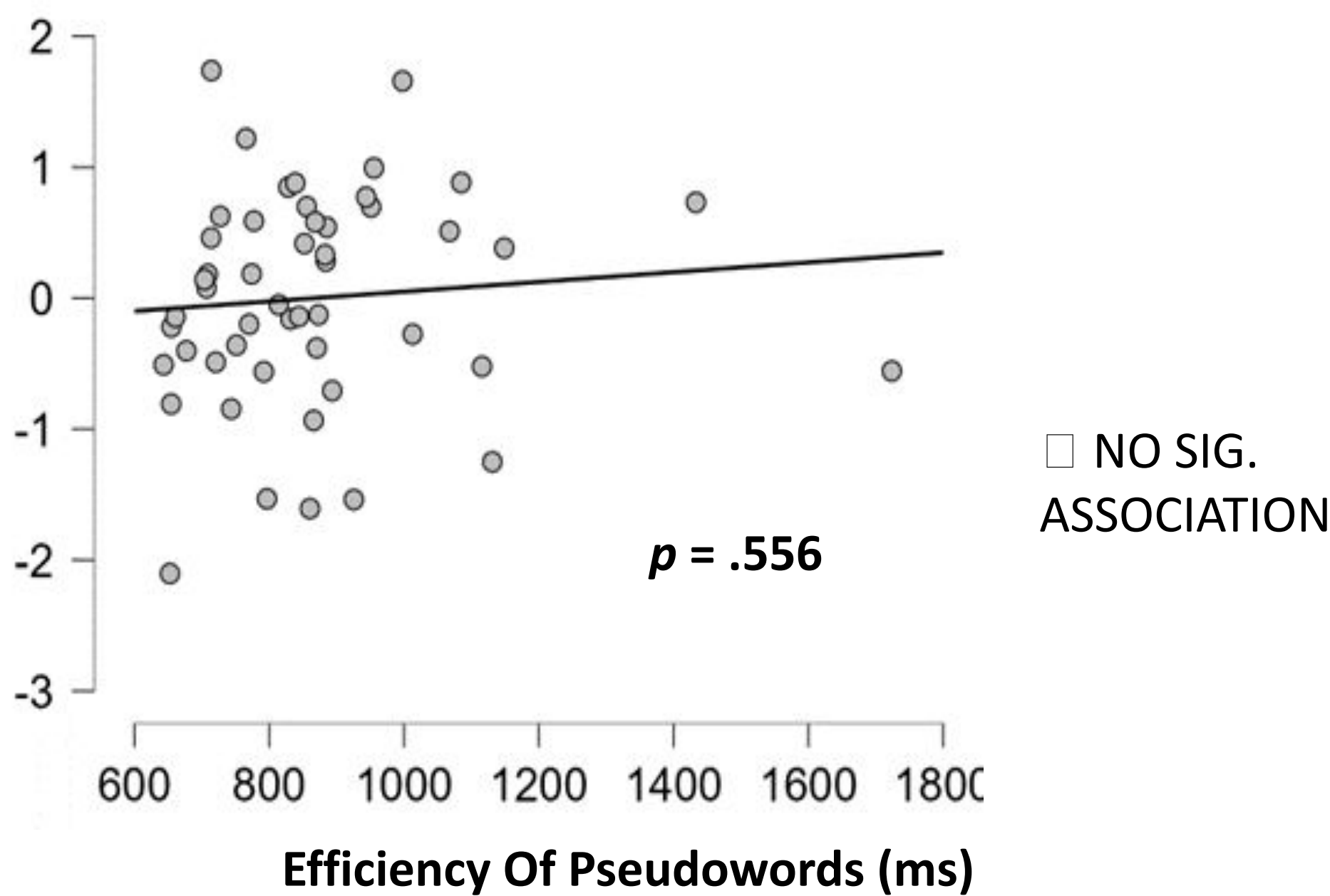
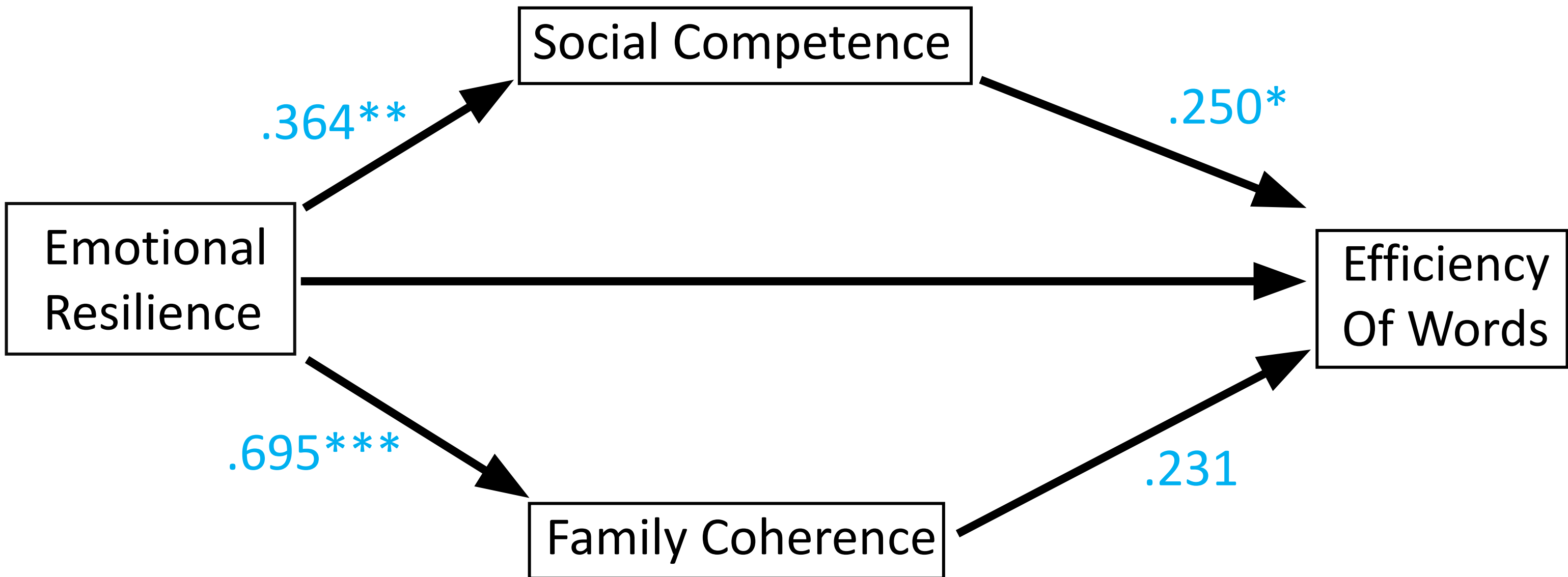


Figure 2. Relationship between emotional resilience and efficiency of pseudowords.

Mediation Analysis



Direct effect,  $B = -.148$ ,  $p = .470$ , 95% CI  $[-.548, .253]$

Total indirect effect,  $B = .251$ ,  $p = .061$ , 95% CI  $[-.012, .514]$

Figure 3. Path diagram for mediation analysis with two mediators. No significant indirect effects between emotional resilience and efficiency of words. Coefficients presented represent standardised estimates. Note: \* $p < .08$ , \*\* $p < .05$ , \*\*\* $p < .001$

Correlation Matrix

	Efficiency of Words	Age	Efficiency of Pseudowords	Emotional Resilience	Family Coherence	Social Competence
Efficiency of Words	1					
Age	-.055	1				
Efficiency of Pseudowords	.319**	.402**	1			
Emotional Resilience	.085	-.052	.09	1		
Family Coherence	.209	-.162	.158	.572***	1	
Social Competence	.258*	-.263*	-.143	.299**	.191	1

Table 1. Pearson's correlations between predictor and response variables. Note: \* $p < .08$ , \*\* $p < .05$ , \*\*\* $p < .001$

Discussion

Conclusion:

- There is no significant association between emotional resilience and reading proficiency among university students.
- Marginal effect of social competence on efficiency of words.

Limitations/Open questions:

- Majority of our participants identified as female. Female participants had a higher standardised score than male participants (0.101 & -0.618 respectively). Female students were shown to adopt more efficient coping styles[7]. Higher emotional resilience is associated with better efficient coping styles [7].
- We did not look at other psycholinguistic components (e.g., reading comprehension [i.e., semantic, and pragmatic engagement], or grammatical error detection tests [i.e., syntactic skills]).

Future directions:

- This suggests emotional resilience may not be a key factor to improve reading proficiency among university students. However, future research should look at other sub-populations with lower emotional resilience, such as individuals from lower socioeconomic backgrounds.