



# Academic language skills: necessary but not sufficient for academic achievement

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# Overview

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## Context & construction

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- Building an academic language skills test

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## Test results

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- Large-scale implementation

3

## Predictive validity

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- Test results and academic achievement: 3 studies

# Academic language skills and achievement

- Students need to acculturate to the academic environment
- Academic literacy – language – performance

Language is the **vehicle** or instrument that enables the **understanding** of how **knowledge** is structured and how **meaning** is negotiated

(van Dyk 2015)

# Construct

## Language knowledge

non-frequent vocabulary

complex grammatical structures

impersonal language

(implicit) relations between text parts

## Strategic competence

“...a set of **metacognitive components** [...]

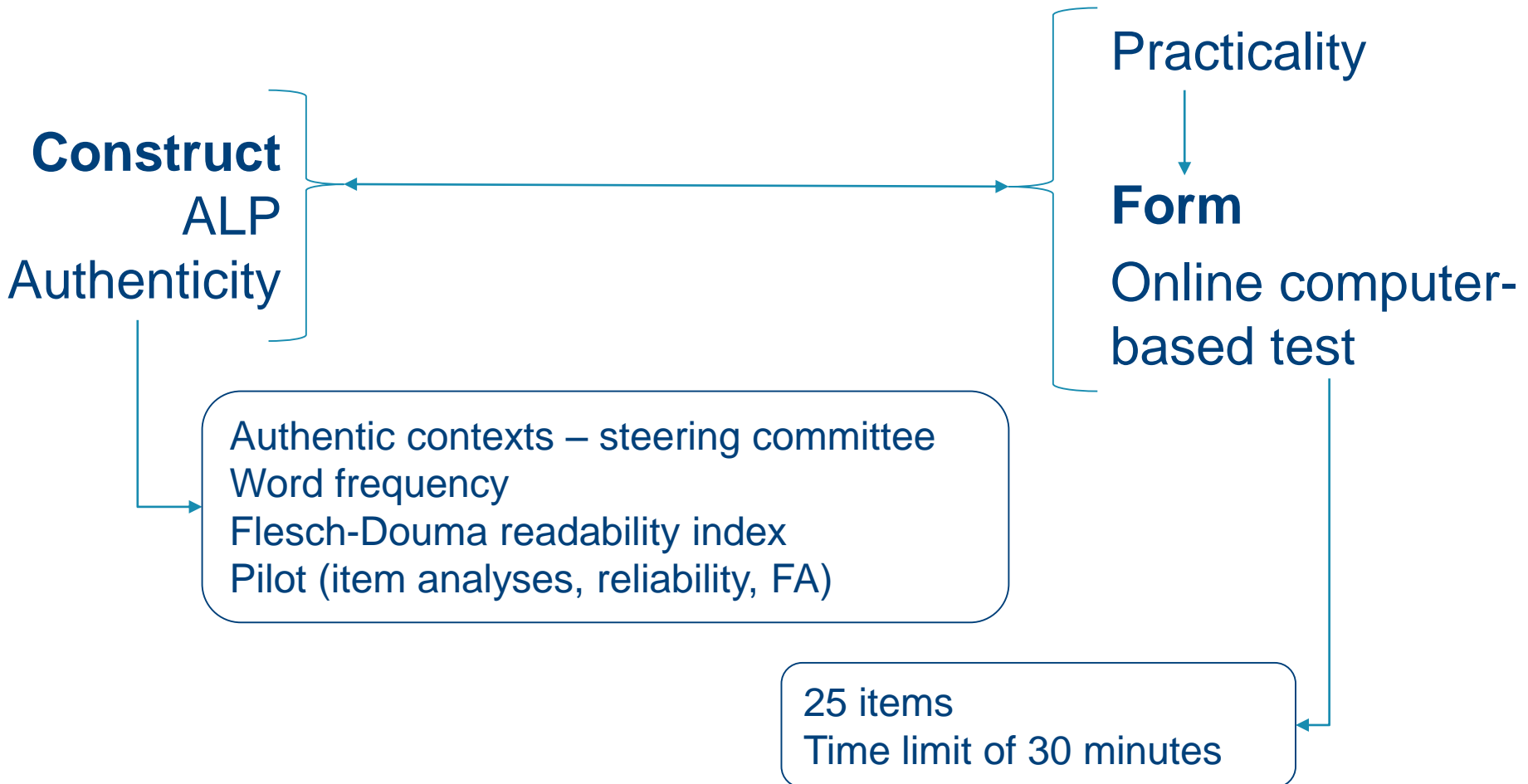
which can be thought of as higher order executive processes

that provide a **cognitive management** function in

language use, as well as in other cognitive activities”

# Academic Language Proficiency

# Operationalisation



# Operationalisation: tasks

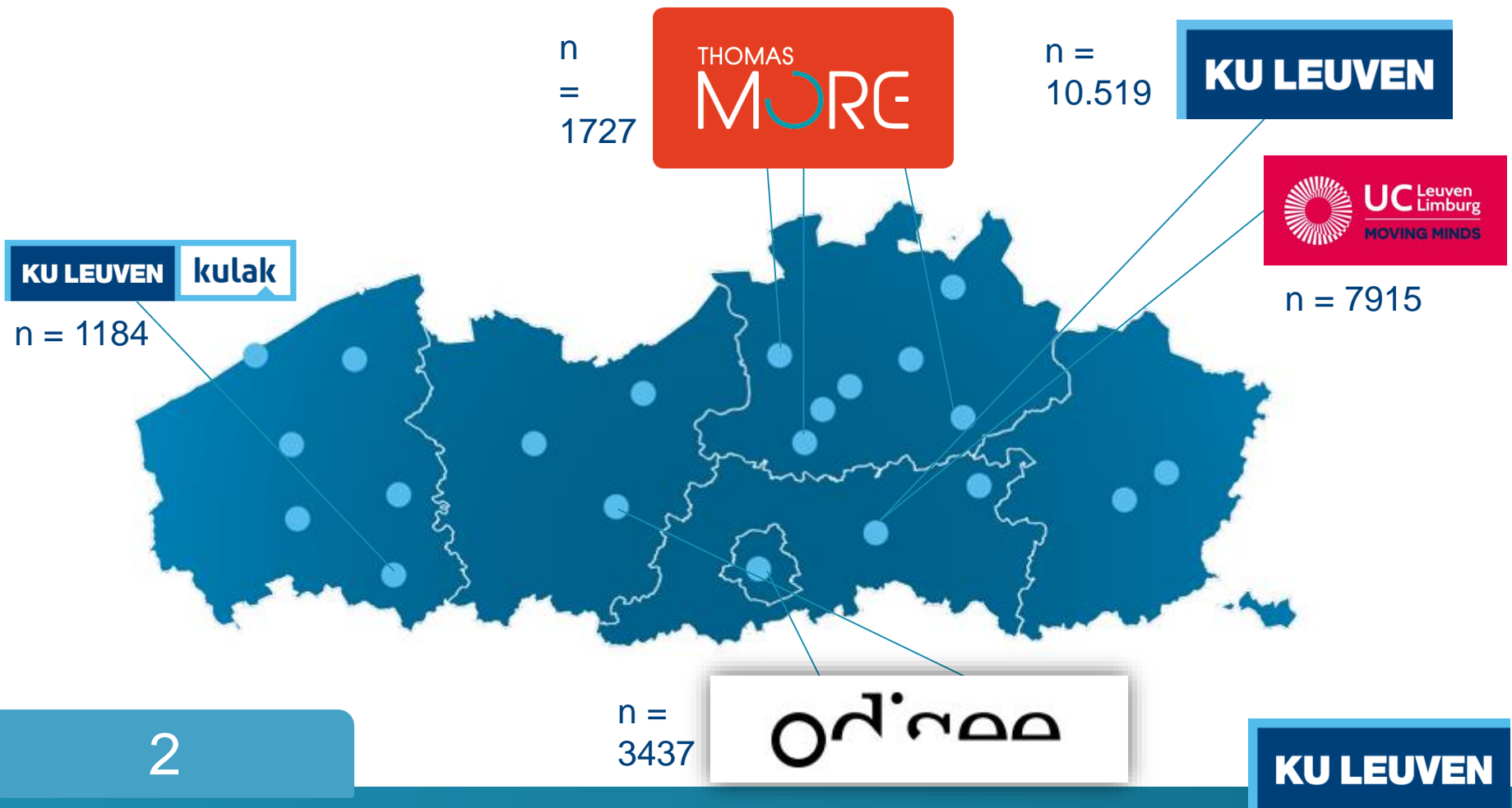
Task	Item type
understand academic vocabulary in context	<ul style="list-style-type: none"><li>- Synonyms</li><li>- Word formation</li><li>- 1 word for 3 contexts</li></ul>
derive different forms of a word and write them down in a given context	<ul style="list-style-type: none"><li>- Word formation</li></ul>
understand relations between sentences	<ul style="list-style-type: none"><li>- Scrambled text</li><li>- Reading for structure</li></ul>
understand text patterns	<ul style="list-style-type: none"><li>- Scrambled text</li><li>- Reading for structure</li></ul>
make meaning of a text beyond sentence level	<ul style="list-style-type: none"><li>- Scrambled text</li><li>- Reading for structure</li><li>- Reading comprehension</li></ul>
understand the essence of a complex text	<ul style="list-style-type: none"><li>- Reading comprehension</li></ul>

# Test results



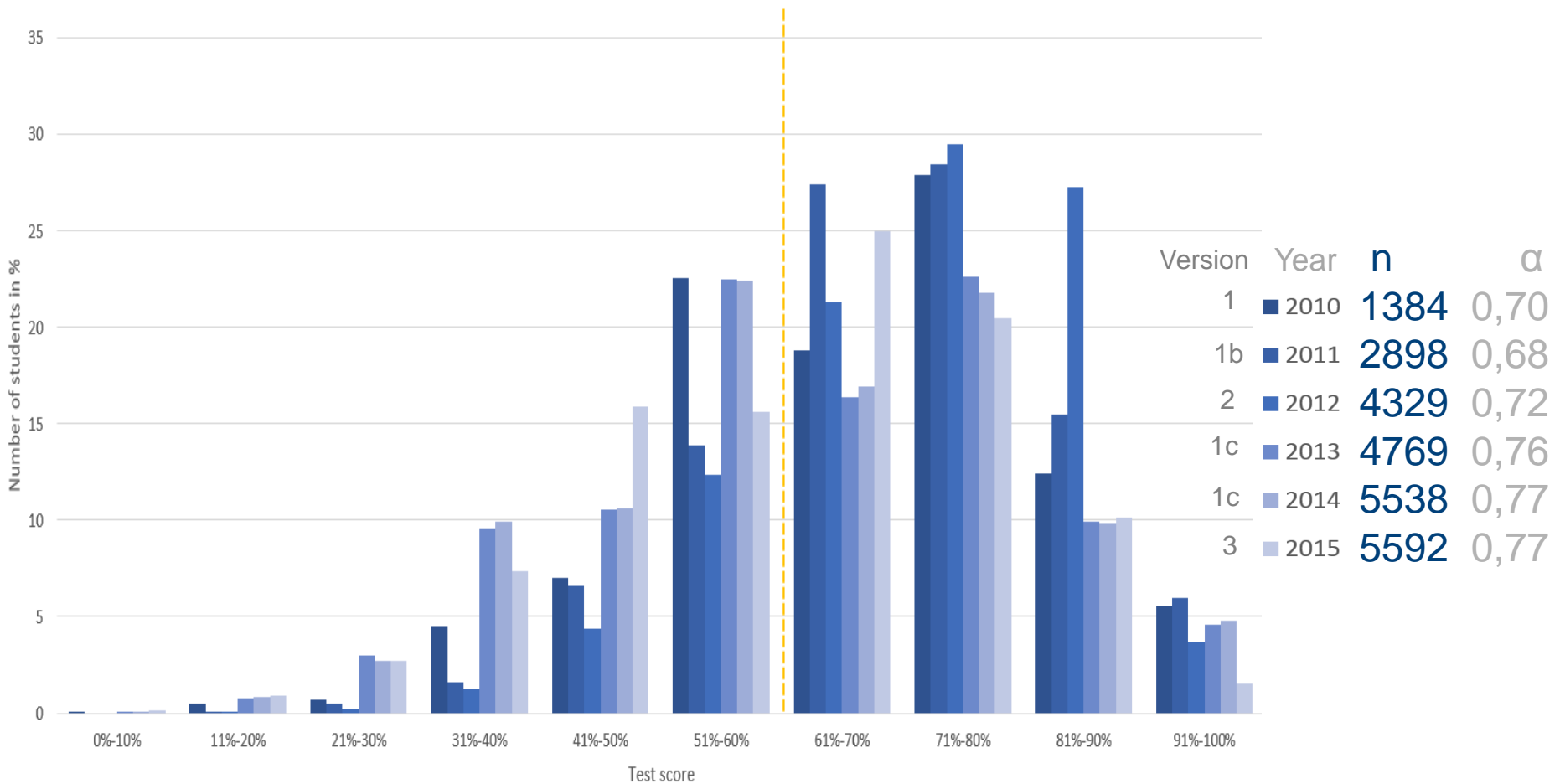
# Test results

- 2010-2015 → 24.781 students of the Association KU Leuven





# Test results



# Validity: 3 studies



# Predictive validity

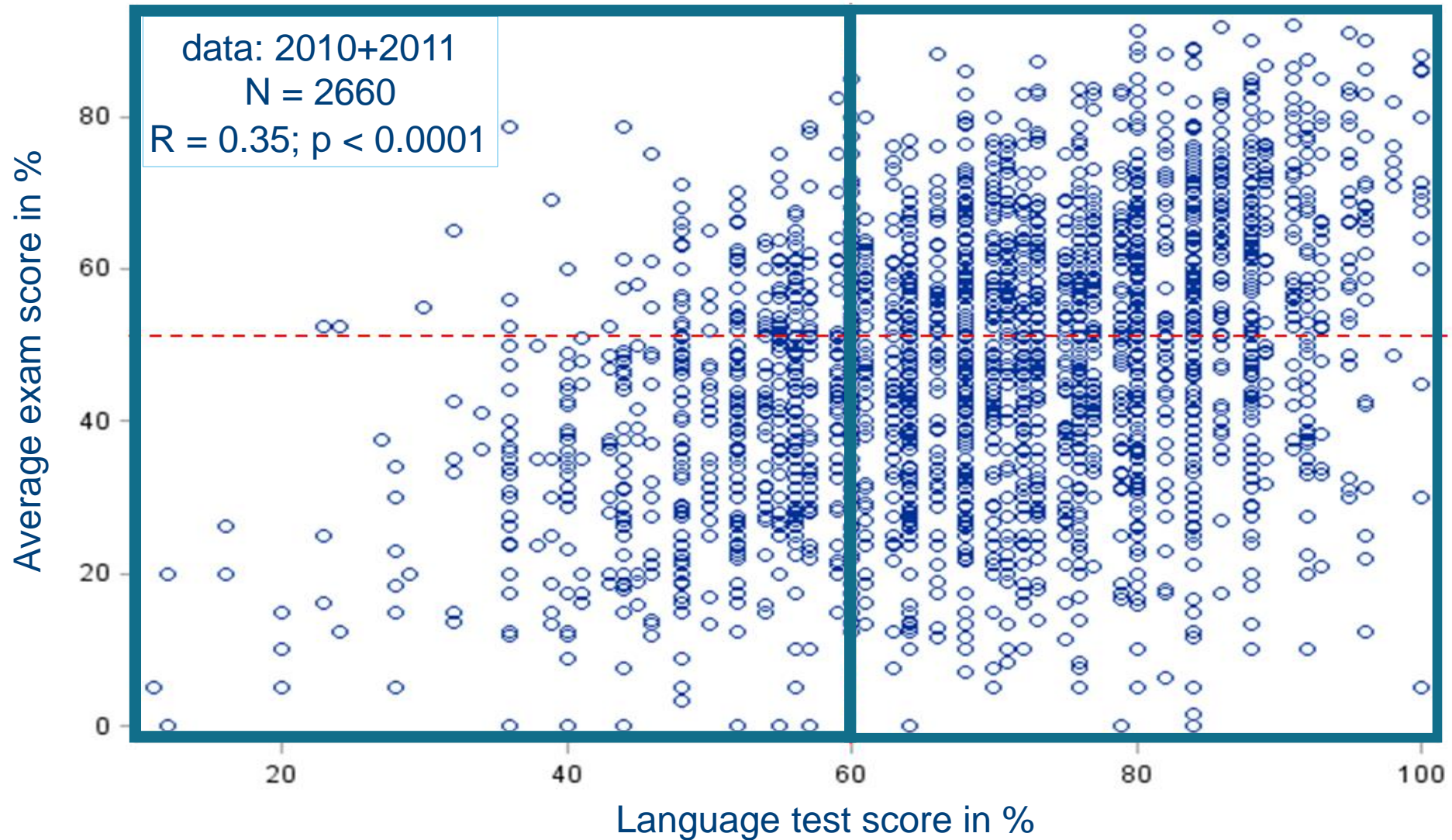
- Validity = test scores + interpretation + uses
- Validity argument
- Focus: predictive validity



# Predictive validity – study 1

- Correlation
- Faculties: Law, Science & technology, Economics, Arts, Social Sciences
- N=2660
- Correlation: language test score – average exam score
- Academic year: 2010-2011 and 2011-2012

# Predictive validity – study 1



# Predictive validity – cut-off point

- Normal distribution → standard deviation

	AVG <50 exams	AVG >50 examens	Total
<60% language test	72.08	27.92	23.82
≥ 60% language test	45.86	54.14	76.18

# Predictive validity – study 2

- Multiple regression
- Faculty of Social Sciences (n=490)
- 2014-15 and 2015-16
- IV's:
  - **gender** (Declercq & verboven 2010, Lacante et al. 2001, Departement of education 2009; 2010)
  - **pre-university education** (Declercq & Verboven 2010, Rombaut et al. 2006, Lacante et al. 2001)
  - **multilingual home situation** (Weideman 2003, Departement of education 2014)
  - **high school GPA** (Van Dyk 2015, Departement of education 2014, Kobrin et al. 2008, Lacante et al. 2001)
  - **language test score** (Van Dyk 2015)
- DV: CSE in January

# Predictive validity – study 2

Results multiple regression analysis

<b>R<sup>2</sup> = 26.1%</b>	<b>β</b>	<b>p</b>
High school GPA (1-10)	.405	.000
Pre-university education (1-7)	.168	.000
Language test score (%)	.117	.005
Multilingual student (0-1)	.113	.005
Gender (0-1)	.073	.070

F(5, 484)=34,21; p<0,000



# Predictive validity – study 3

- **UCLL** (Jacques, Walravens, Vanhoren & Sterckx, 2015)
  - Department of economics
  - 536 first-year college students (2013-2014)
  - Correlation: Language test score – CSE
  - In January  $r=0,297$  ( $n=536$ )
  - In June  $r=0,302$  ( $n=506$ )

# Predictive validity – study 3

- Large differences according to subdiscipline!

AF: no correlation	↔	BV: $r=0,45$
FV: no correlation		MA: $r=0,43$
		MMA: $r=0,68$
- Threshold of 60% still meaningful?
  - Average of total group = 58,83%

# Conclusion

- Low-stakes academic language test
- Useful?
  - Weak but significant relation with study success
  - Small but significant contribution as predictor
  - Search for meaningful threshold → warning signal
- The test as a starting point for further (self-)investigation and/or remedial activities
- [www.luci.be](http://www.luci.be)