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FACULTY OF PSYCHOLOGY
AND EDUCATIONAL SCIENCES

DEPARTMENT OF EDUCATIONAL STUDIES
RESEARCH GROUP METIS

MEASURING PRIMARY SCHOOL STUDENTS' SOCIAL CITIZENSHIP SKILLS: THE DEVELOPMENT AND VALIDATION OF A VIDEO-BASED SITUATIONAL JUDGEMENT TEST

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young IN

INTRODUCTION

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CONTEXT

Socio-political and cultural changes

Dusi, Steinbach & Messetti, 2012

Decline of shared values
Growing individualisation
Less social cohesion

e.g. Geijsel, Ledoux, Reumerman & ten Dam, 2012

e.g. Hoskins, Janmaat & Villalbla, 2012

Focus on fostering citizenship competences

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CONTEXT

Political citizenship

- Government
- Citizenship competences: knowledge about voting, political participation, democratic attitude
- Youngsters as not-yet-citizens
- Citizenship as outcome

e.g. Kiousis & McDevitt, 2008

Social citizenship

- Civil society
- Citizenship competences: appreciate diversity, social involvement, handle conflicts
- Youngsters as already citizens
- Citizenship as practice

e.g. Oser & Veugelers, 2008

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CONCEPTUAL FRAMEWORK

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CITIZENSHIP COMPETENCES

The knowledge, skills, attitudes and reflections that young people need to successfully carry out day-to-day social activities in a democratic and multicultural society (Hoskins et al., 2011; ten Dam & Volman, 2007).

- (Acting democratically)
- Acting in a socially responsible manner
- Dealing with conflicts
- Dealing with differences

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CITIZENSHIP AND EDUCATION

Schools have a key role in fostering students' citizenship competences (Dusi et al., 2012; Hoskins et al., 2012; Leenders et al., 2008).

- Several governments have introduced citizenship education in the curriculum of many schools (Eurydice, 2017).

⟷ Limited knowledge about the assessment of students' citizenship competences (Kerr, Keating, & Ireland, 2009; Ledoux, Meijer, Van der Veen, & Breetvelt, 2013)

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MEASURING CITIZENSHIP COMPETENCES

- Tests and questionnaires as most common methods

(Daas, ten Dam, & Dijkstra, 2016)

Knowledge

Attitudes, reflection, skills

Advantages
Easily allows data collection from big samples
Little time consuming to score
Do not require specific expertise of the examiner

Ledoux et al., 2013

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SELF-PERCEPTION VERSUS DIRECT MEASUREMENT

- Questionnaires: self-perceived citizenship skills, citizenship self-efficacy of students
  - Subjectivity (Ledoux et al., 2013; ten Dam et al., 2003; ten Dam & Volman, 2007)
  - Social desirability (Daas et al., 2016; Ledoux et al., 2013; ten Dam et al., 2003; ten Dam & Volman, 2007)
  - Over- or underestimation of students (Ledoux et al., 2013)

≠ students' actual citizenship skills (Ledoux et al., 2013)

↳ Objective measurement is necessary

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WHAT ABOUT THE CONTEXT?

- The development of citizenship is a sociocultural practice and thus always related to a specific context (Lawy & Biesta, 2006; ten Dam et al., 2010)

  - Traditional tests and questionnaires do not take this context into account
  - However, this context is necessary for a meaningful assessment (Daas et al., 2016)

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PURPOSE OF THE STUDY

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The development and validation of a video-based situational judgement test to measure the social citizenship skills of sixth grade primary school students in multiple contexts in an objective way

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METHODOLOGY

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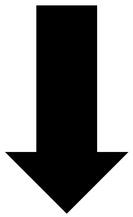
MEANINGFUL ASSESSMENT

- Observations in real situations
  - Time consuming, complex, expensive (Ledoux et al., 2013)



Situational judgement test (SJT): An assessment method that presents the respondents realistic situations and a variety of ways in which they could respond the situation (Lievens & De Soete, 2015)

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TEST DEVELOPMENT

Video-based **situational judgement test**

- Citizenship always related to a specific context
- Presents the students different social and interpersonal situations associated to the test matrix

Objective measurement of social citizenship skills

 Students need to use their social citizenship skills to answer the items correctly

TEST DEVELOPMENT

Video-based situational judgement test

- Situations are presented by means of a video-fragment
- **Advantages** of video:
  - Reduction of the impact of reading comprehension (Lievens & De Soete, 2015)
  - Visual as well as auditory information (Kanning et al., 2006)
  - Easier for students to empathize with the situation (Kanning et al., 2006)

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DIFFERENT STAGES OF THE TEST DEVELOPMENT

Development of test matrix

Screening by expert panel

Development of test items

Screening by:
- Expert panel
- 40 students
- 2 teachers

Adaptation of test items

Calibration study with 789 students in 33 primary schools

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RESULTS

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DEVELOPMENT & SCREENING OF TEST MATRIX

Test matrix, adapted version of ten Dam, Geijsel, Reumerman, & Ledoux, 2011

Soci	
1. Ac mann	
2. De	
3. De	

An expert panel reviewed the test matrix:

- Are the social tasks appropriate to describe social citizenship skills?
- Are the required skills for each social task correct and do they cover the social tasks sufficiently?
- Are crucial elements lacking in the test matrix?

 Check whether the test matrix is accurate to measure the construct ‘social citizenship skills’

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Development of test matrix → Screening by expert panel

ITEM DEVELOPMENT & SCREENING

- Screening of the test items in 3 stages to guarantee the quality of the test

Expert panel	The appropriateness of the test items to measure social citizenship skills	Content validity
Pilot study of 40 sixth grade students	Difficulty & comprehensibility of the test items and duration of the test	Formulation of the test items
Teachers	Difficulty & connection to the students' world	Ecological validity

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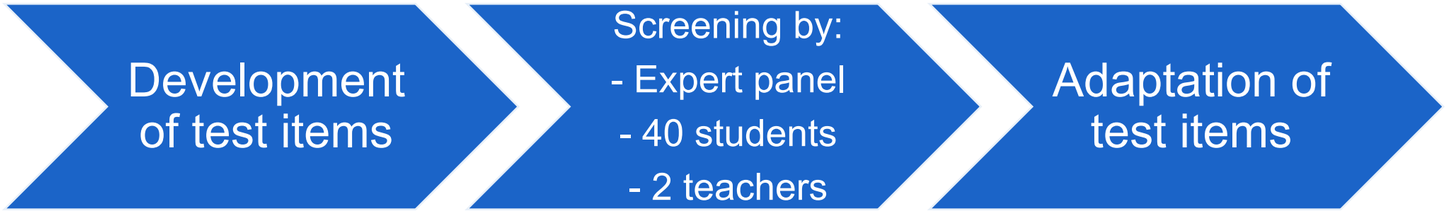

ITEM DEVELOPMENT AND SCREENING

31 items

3. Dealing with differences
3.2 The student can use adapted language in unfamiliar social situations
What would you say in this situation?
O ‘It doesn’t matter how people look like to work together’
O ‘It is natural that people prefer to work together with people with the same skin color’
O ‘Everybody can choose whom he/she prefers to work with’

- Youth scales

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Development of test items → Screening by: - Expert panel - 40 students - 2 teachers → Adaptation of test items

PSYCHOMETRICAL QUALITY

- Item difficulty
- Item discrimination

- Exploratory factor analyses

- Reliability: KR-20 (Kuder and Richardson Formula 20)
  - Appropriate to measure the reliability of binary coded instruments (Salkind, 2010)

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Calibration study with 789 students in 33 primary schools

ITEM DIFFICULTY

Item	p-value	Item	p-value	Item	p-value
Item 1	0.548223	Item 12	0.454892	Item 23	0.900889
Item 2	0.695153	Item 13	0.770408	Item 24	0.832487
Item 3	0.56051	Item 14	0.827192	Item 25	0.611538
Item 4	0.368488	Item 15	0.208386	Item 26	0.723919
Item 5	0.78526	Item 16	0.722999	Item 27	0.873257
Item 6	0.728081	Item 17	0.534351	Item 28	0.625635
Item 7	0.406607	Item 18	0.692112	Item 29	0.380711
Item 8	0.852041	Item 19	0.639949	Item 30	0.696701
Item 9	0.676845	Item 20	0.776081	Item 31	0.906769
Item 10	0.912484	Item 21	0.868957		
Item 11	0.402284	Item 22	0.669211		

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p-values have to be between .05 en .95

No items removed

Calibration study with 789 students in 33 primary schools

ITEM DISCRIMINATION

Item	Point-biseral corr.	**Item**	Point-biseral corr.	**Item**	Point-biseral corr.
Item 1	0.220406	Item 12	0.309251	Item 23	0.30162
Item 2	0.360083	**Item 13**	**0.090726**	Item 24	0.264824
Item 3	0.274908	Item 14	0.260303	Item 25	0.374247
Item 4	**0.147847**	Item 15	0.261262	Item 26	0.223003
Item 5	0.401556	Item 16	0.354892	Item 27	0.26683
Item 6	0.215675	Item 17	0.201385	Item 28	0.447405
Item 7	**0.107524**	Item 18	0.293163	Item 29	0.235508
Item 8	0.346472	Item 19	0.177579	Item 30	0.25147
Item 9	0.203011	Item 20	0.414187	Item 31	0.278861
Item 10	0.2603	Item 21	0.248331		
Item 11	0.262195	Item 22	0.366673		

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Items have to be positive and >.15

 3 items removed

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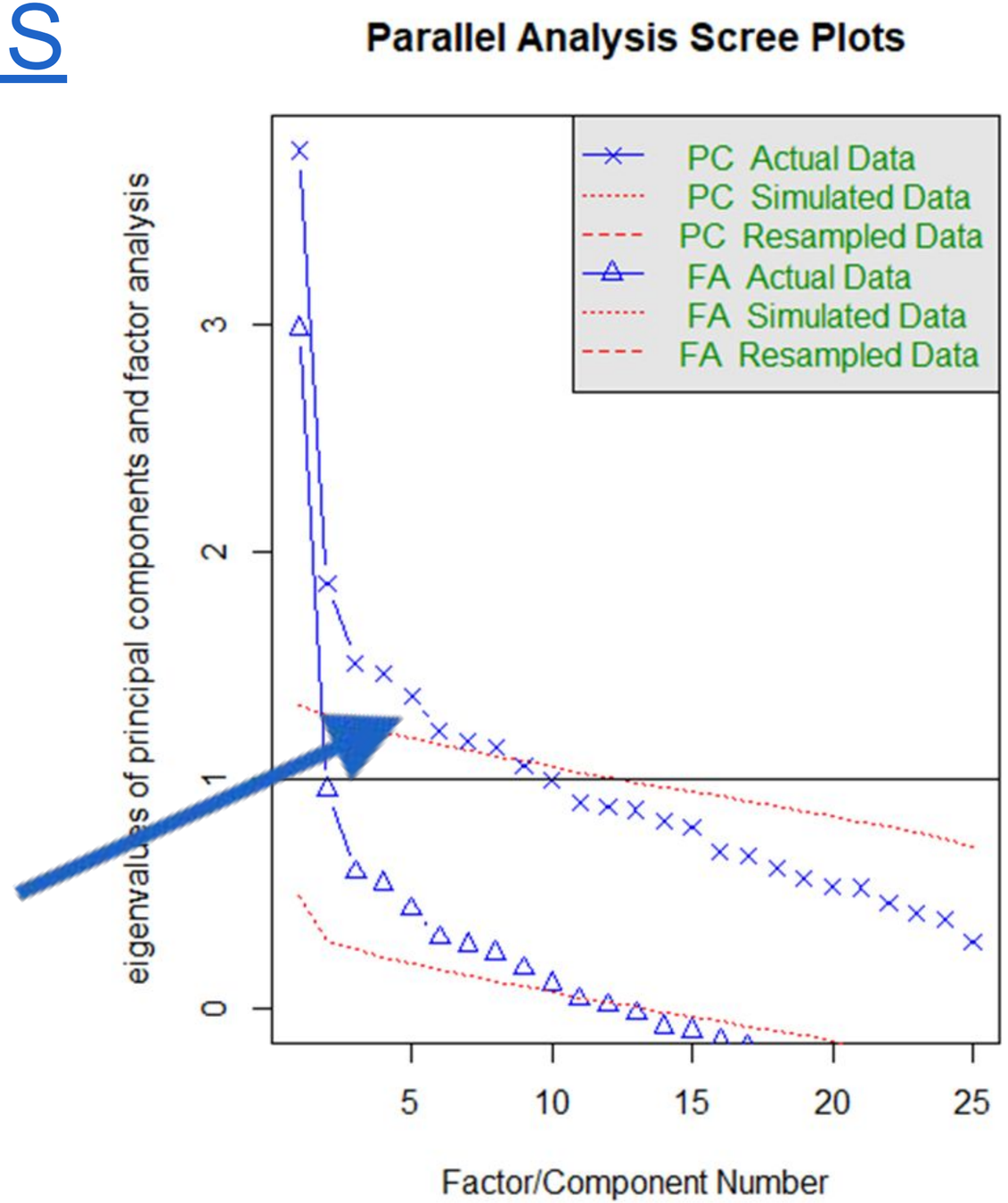
PARALLEL ANALYSIS



9 factors

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RELIABILITY (KR-20)

= Kuder and Richardson Formula 20

$$r = \frac{K}{K-1}\left[1 - \frac{\sum_{i=1}^{K} p_i q_i}{\sigma_x^2}\right] = .624$$

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DISCUSSION AND CONCLUSION

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MEASURING SOCIAL CITIZENSHIP SKILLS

- The development and validation of a video-based situational judgement test
  - An objective measurement of skills <-> self-perception (Daas, 2019; Ledoux et al., 2013)
  - Taking into account the different citizenship contexts (Daas, Dijkstra, Karsten, & ten Dam)

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TEST DEVELOPMENT AND VALIDATION

Development of test matrix

Screening by expert panel

Development of test items

Construct validity

Ecological validity

Screening by:
- Expert panel
- 40 students
- 2 teachers

Adaptation of test items

Calibration study with 789 students in 33 primary schools

Content validity, ecological validity

Psychometrical quality

CITIZENSHIP AS A CONTEXTUAL CONCEPT

- Citizenship development takes place in many different contexts: family, school, friends… (ten Dam, Dijsktra, Ledoux, & van der Veen, 2010)
- Different aspects of social citizenship: appreciating diversity, dealing with conflicts, social involvement… (Oser & Veugelers, 2008)

 The different contexts demand different social citizenship skills.

  Many underlying factors to measure students' social citizenship skills

IMPLICATIONS FOR FURTHER RESEARCH

- The test measures certain aspects of social citizenship skills
  - Important to clearly define the different aspects of social citizenship skills and the different contexts in which they are measured.

- Further research to check the **predicitive validity**

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DESCRIPTIVE STATISTICS

	M(SD)
Gender	0.525(0.500)
Highest educational level of the mother	4.559(0.802)
Home language	0.350(0.477)

Gender:
- 0 = boy
- 1 = girl

Highest educational level mother:
- 1 = No education
- 2 = Primary education
- 3 = Lower secondary education
- 4 = Higher secondary education
- 5 = Higher education

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Home language:
- 0 = speaking only Dutch at home
- 1 = speaking at least one other language than Dutch at home

Table 1. Multilevel parameter estimates

	Model 1
	Coefficients
Intercept	17.116
Gender	2.551***
Educational level of the mother (ref: higher secondary education)	
No education	1.102
Primary education	-0.803
Lower secondary education	-0.342
Higher education	1.326***
Home language (ref: Dutch)	-0.976***

* significant at the .05 level; ** significant at the .01 level; *** significant at the .001 level

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