



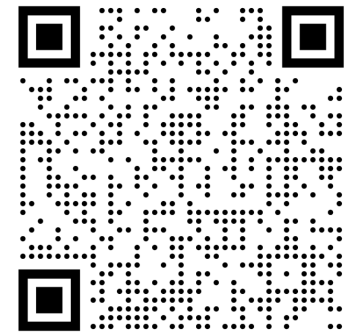
Validation of a French scale to assess educators' attitudes toward inclusive education

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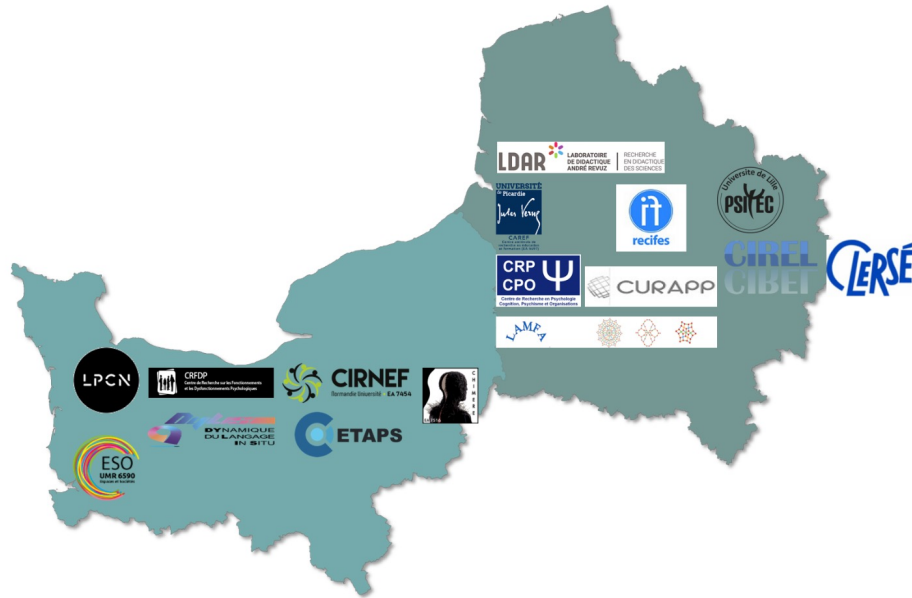
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ABOUT THE PIA3- 100%IDT PROJECT



Aim

Develop research and training initiatives in France to promote inclusive education

Doctoral contract

Teachers' inclusive attitudes and practices: applying the theory of planned behavior

Step 1 : material creation

INTRODUCTION

STUDY 1

1. METHOD

2. RESULTS

STUDY 2

1. METHOD

2. RESULTS

DISCUSSION & CONCLUSION



INCLUSIVE EDUCATION

Schooling for **students with special educational needs (SEN)**

Full involvement of each student in the classroom and provision of the **necessary support to meet their needs** [1, 2]

Additional support and adapted pedagogical approaches

Increased number of SEN pupils in mainstream schools [3]

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DISCUSSION &
CONCLUSION

TEACHERS' ATTITUDES TOWARD INCLUSIVE EDUCATION (ATIE)

Favorable/unfavorable **psychological evaluations** of an object, behaviour or aspect of the world [1]

Tri-partite model : cognitive, affective and conative [2]

Range from neutral to positive with a tendency to improve [3]

Influence **teachers' willingness** to work with students with SEN[4]



[1] Eagly and Chaiken (1993) [2] Rosenberg & al. (1960) [3] Saloviita (2022) [4] Hind & al. (2019)

INTRODUCTION

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PREVIOUS SCALES

- Mostly developed in English [1]
- **Multidimensional** [2] or cognitive dimension
- Specific to teachers/parents (e.g. Teacher's Attitudes Towards Inclusion Scale [3]; My thinking About Inclusion Scale [4])

[1] Mahat (2008) [2] Antonak & Larrivee (1995) [3] Monsen et al. (2015) [4] Stoiber et al. (1998)





INTRODUCTION

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EMERGING ISSUES

Need to take into account all the actors involved in inclusive education, such as social and medical workers [1]

Interprofessional perspective [2, 3]

Some adaptations but these remain distinct tools [4]

[1] Brasselet et al. (2023) [2] D'amour & Oandasan (2005) [3] Hedegaard-Soerensen et al. (2018) [4] Palmer et al. (1998) [5]

INTRODUCTION

STUDY 1

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RESEARCH AIM

Develop and validate a French-language scale to measure ATIE



Among teachers



Among paraprofessionals

STUDY 1

1. METHOD

2. RESULTS

STUDY 2

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DISCUSSION & CONCLUSION

MATERIAL CONSTRUCTION

- Based on a literature review of 9 **pre-existing scales** [1]
- Salient categories (12), sorted by redundancy and opposition
- Lexical adjustment to suit a broader **spectrum of professionals**
- **19 items** - 9 reversed
- 5-point Likert scale (**Completely disagree** - **Completely agree**)

OpenScience Framework pre-registrator

- Materials, databases and codebooks available
- Research ethics board approval



STUDY 1

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MATERIAL CONSTRUCTION

Choice of cognitive dimension

- Cognitive disposition to judge and evaluate behavior in relation to our beliefs and knowledge [1].
- Distinct enough to warrant more specific examination (e.g., inconsistent correlations between this and other sub-dimensions) [2]

1. METHOD

2. RESULTS

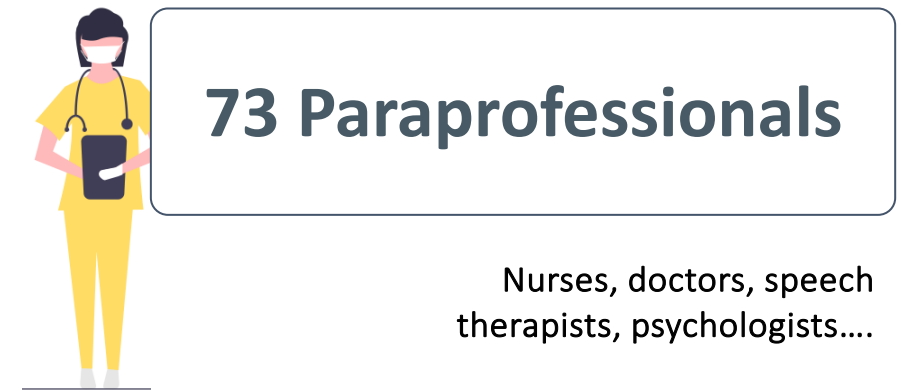
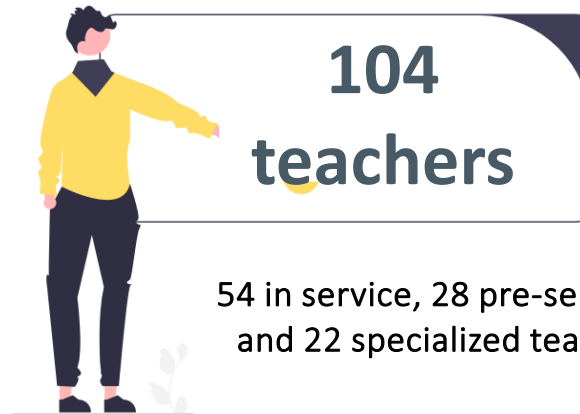
STUDY 2

1. METHOD

2. RESULTS

DISCUSSION &
CONCLUSION

Sample (N=177) $M_{age} = 36.2$ ($SD = 11.5$) $M_{professional\ experience} = 11$ ($SD = 11.2$)




Procedure

Online surveys (Lime Survey), random order of items

STUDY 2

DISCUSSION &
CONCLUSION

First Exploratory factor analysis (EFA) - 19 items



	% of variance & Eigenvalue
Factor 1	22.6 >1
Factor 2	12.9 >1
Factor 3	12.2 <1 [1]

Removal of saturating items on this F3 (redundant or semantically too distant) to preserve scale consistency and avoid replication difficulties [2].

1. METHOD

2. RESULTS

STUDY 2

1. METHOD

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DISCUSSION &
CONCLUSION

Second EFA- 16 items $\omega = .91$



FACTOR 1



Classroom
management
and teaching

EXAMPLE

« I believe that the presence of students with SEN creates too much disruption in the classroom »

FACTOR 2



Benefits and
risks for
Students

EXAMPLE

« I believe that educating students with SEN in a regular classroom allows them to acquire skills more quickly »

STUDY 2

1. METHOD

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DISCUSSION &
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Aim

Confirm the factor structure of the 16-item CATIES with a confirmatory factor analysis



1. METHOD

2. RESULTS

DISCUSSION &
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MATERIAL

CATIES ($\omega = .91$) - 16 items

Teacher's Efficacy Scale ($\omega = .72$) [1,2] - 15 items

Convergent validity [3]

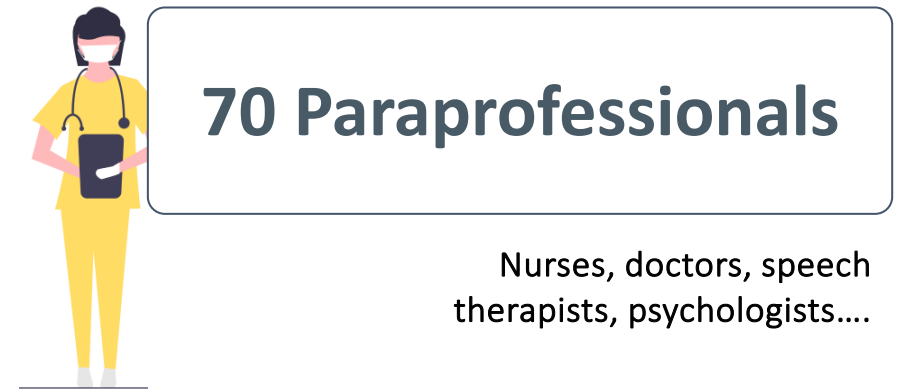
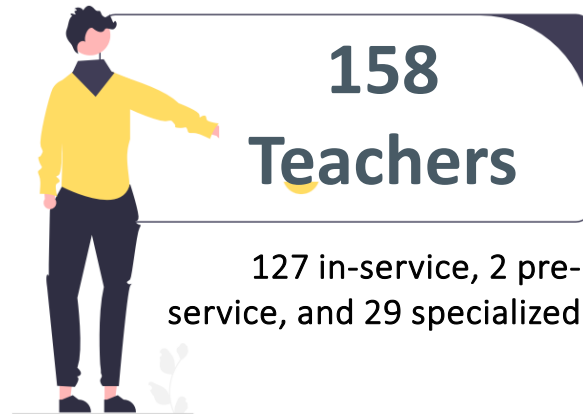
+ Socio-demographic information

1. METHOD

2. RESULTS

DISCUSSION & CONCLUSION

Sample (N=228) $M_{age} = 42.8$ ($SD = 10.5$) $M_{professional\ experience} = 16.5$ ($SD = 10.9$)



Procedure

Online surveys (Lime Survey), random order of items

Confirmatory factor analysis (CFA) - 16 items

				RMSEA 90% CI	
CFI	TLI	SRMR	RMSEA	Lower	Upper
.92	.90	.05	<.08	.07	.09

Note. N = 228

Model adequacy [1]

Confirmatory factor analysis (CFA) - 16 items

				RMSEA 90% CI	
CFI	TLI	SRMR	RMSEA	Lower	Upper
.92	.90	.05	<.08	.07	.09

Note. N = 228

Weak but appropriate [1]

[1] Bentler & Bonett, 1980

Confirmatory factor analysis (CFA) - 16 items

				RMSEA 90% CI	
CFI	TLI	SRMR	RMSEA	Lower	Upper
.92	.90	.05	<.08	.07	.09

Note. N = 228

Acceptable

Chi- square (χ^2 [df = 103] = 247; $p < 0,001$) but (χ^2/ddl) <3 [1]

Confirmatory factor analysis (CFA) - 16 items

				RMSEA 90% CI	
CFI	TLI	SRMR	RMSEA	Lower	Upper
.92	.90	.05	<.08	.07	.09

Note. N = 228

High but acceptable [1]

Confirmatory factor analysis (CFA) - 16 items

The 16 items are significantly correlated with the mean score (from $r = 0.40, p < 0.001$ to $r = 0.73, p < 0.001$) $\omega = .91$.

Convergent validity : positive correlations between mean scores of TES and CATIES ($r = .429, p < .001$), between F1 and TES ($r = .40, p < .001$), and between F2 and TES ($r = .44, p < .001$)

		CATIES
TE	Pearson's r	.43***
	p-value	<.001

Note. $N = 158$ *** $p < .001$

Confirmatory factor analysis (CFA) - 16 items

- Neutral and slightly positive ($M_{PP} = 3.44$, $SD_{PP} = 0.63$; $M_{TE} = 3.30$, $SD_{TE} = 0.76$)
- More positive attitudes for “Students” (F2) than “Classroom management” (F1), $t(227) = -13.2$, $p < .001$
- F1: more positive for PP than TE, $t(226) = 3.21$, $p = 0.002$

DISCUSSION & CONCLUSION

- CATIES assesses cognitive ATIE along two key dimensions: classroom management and teaching, and benefits and risks for students.
- These dimensions are also found in other tools (e.g. IIQ [1], ORI [2]).

[1] Hastings & Oakford (2003) [2] Antonak & Larrivee (1995) [3] Wilczenski (1995) [4] Monsen et al. (2015) [5] Bailey (2004)

DISCUSSION & CONCLUSION

- PP had more positive ATIE than TE with regard to teaching and classroom management [1]

→ *Mixed-method comparative study in progress*

More positive attitudes about benefits and risks for students (F2) than about teaching and classroom management (F1)

→ Teachers seem to be aware of the benefits of inclusive education on students' social participation [2] and academic skills [3].

DISCUSSION & CONCLUSION

- Parents have similar concerns (classroom management and students' academic and social skills) [1]

→ *Outlook: validation with parents*

- The concept of creating an inclusive community has gained ground in recent years [2]

The CATIES :

- Responds to this emerging need
- Can help researchers from French-speaking countries to properly assess ATIE

LIMITATIONS

- Generalization = Participants' willingness to respond = specific interest in the topic ?
- The scale has been validated in the French context, but may not be adapted to certain French-speaking contexts (institutional, legislative, cultural, economic, and social differences)
- Cross-cultural validation ?





Thank you for your attention!

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