

Professional Action Competence in Education for Sustainability for Pre-service Physical Education Teachers: A person-centered study

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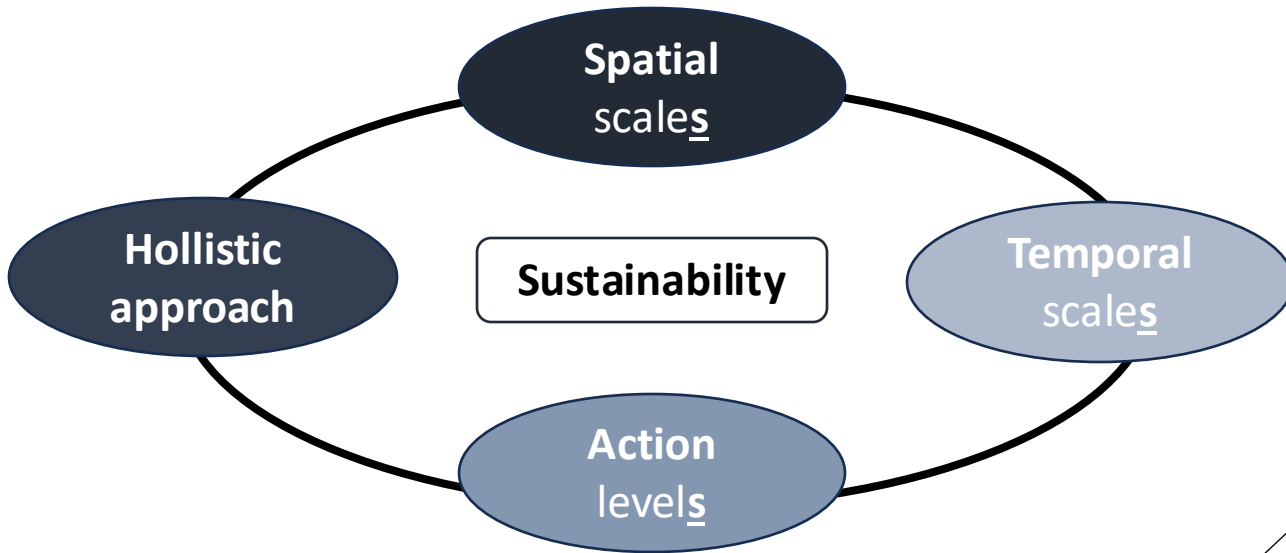
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DOCTORALE
Sciences du
Mouvement
Humain



"meeting the needs and aspirations of the present generation without compromising the ability of future generations to meet their needs" (Bruntland, 1987, p. 292)



Importance of teachers' **professional competencies**
(Stevenson et al., 2017 ; Boeve-de Pauw et al., 2015)



(Sass et al., 2022)

Professional Action Competence in Education for Sustainability (PACesd)



Cultivate **skilled** and **active** citizens who are informed and **motivated** to live sustainably and contribute to a more sustainable society
(Carbach & Fischer, 2017)

Emancipatory Education for Sustainability

All school disciplines must be involved
(UNESCO, 2006)

New thematic in physical education
Specificities of the discipline (role of the
body and movement)
(Royet et al., 2024)

A need to assess the current situation

Importance of teachers'
professional competencies
(Stevenson et al., 2017 ; Boeve-de Pauw
et al., 2015)



(Sass et al., 2022)

**Professional Action
Competence** in Education for
Sustainability (PACesd)

Pedagogical
content
knowledge

Willingness

Self-
efficacy

Introduction

Methods

Results & Discussion

Conclusion

Physical Education Teachers'
Professional Action Competence in
Education for Sustainability (PACesd)

Few studies on professional action competence in education for sustainability
Few studies in physical education field

Research questions

(1) Future PE
teachers' **PACesd**
levels



(2) Future PE
teachers' **PACesd**
profiles



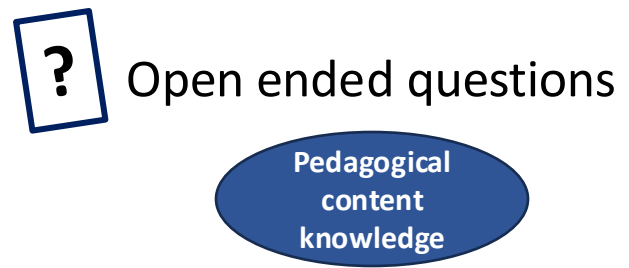
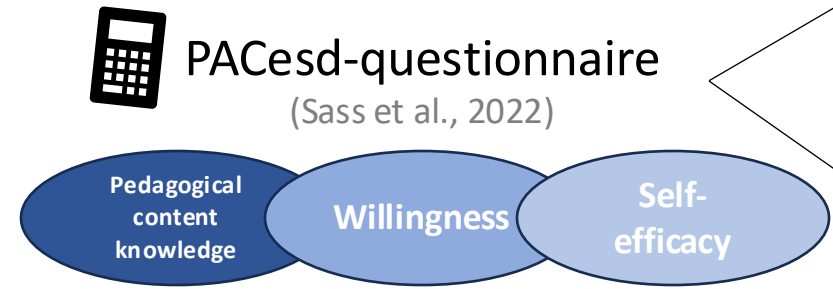
Cross-sectional design – Mixed Method Study

Analyses

Participants

 **412** future french PE teachers'

Measures



(1) PACesd levels
Descriptive statistics /
Correlations / One-sample t-test

Thematic Deductive & Inductive Analysis
Quantification

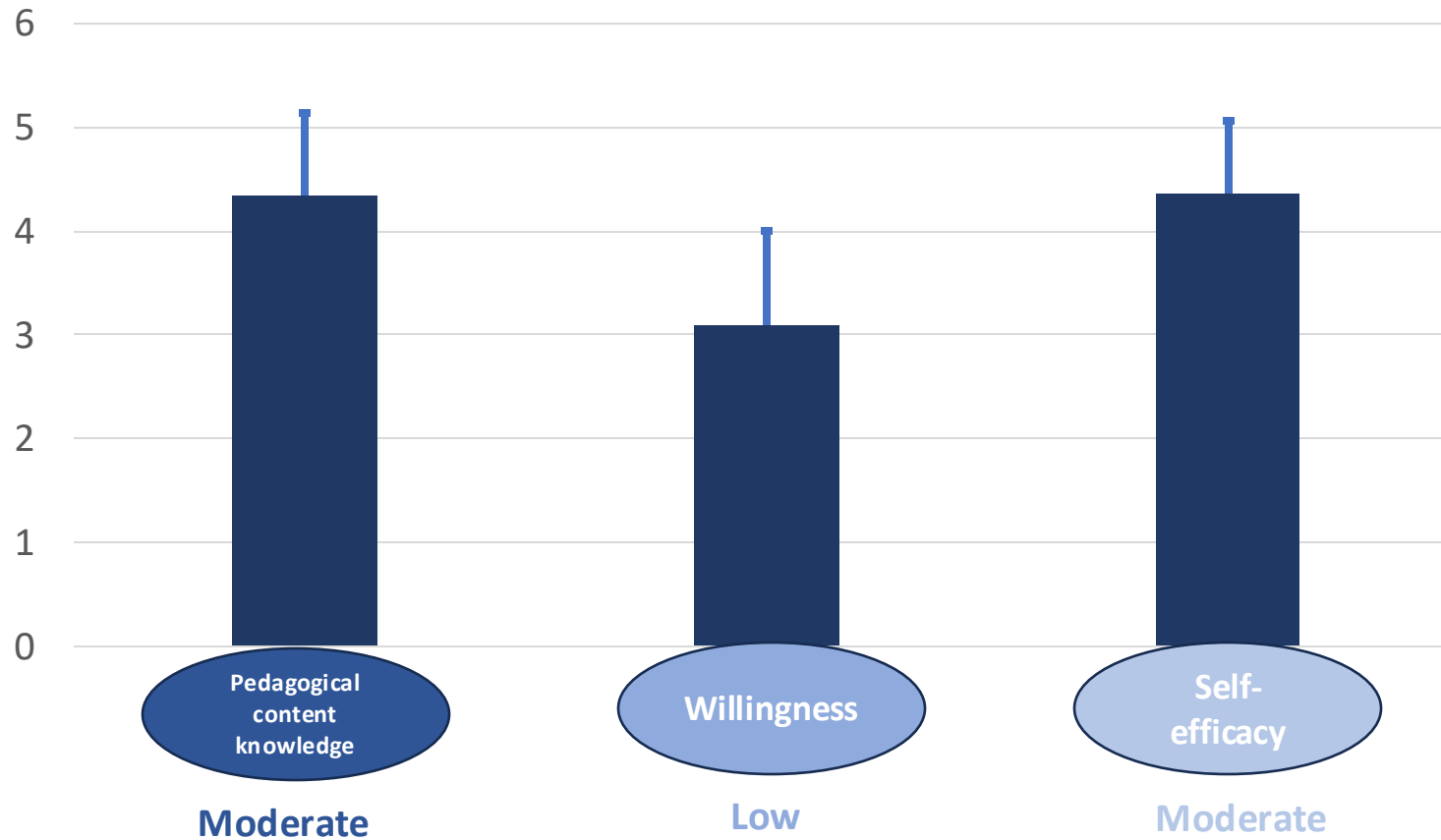
(2) PACesd profiles
Latent profile Analysis

Chi-Square Analysis

(1) Future PE teachers' **PACesd** level



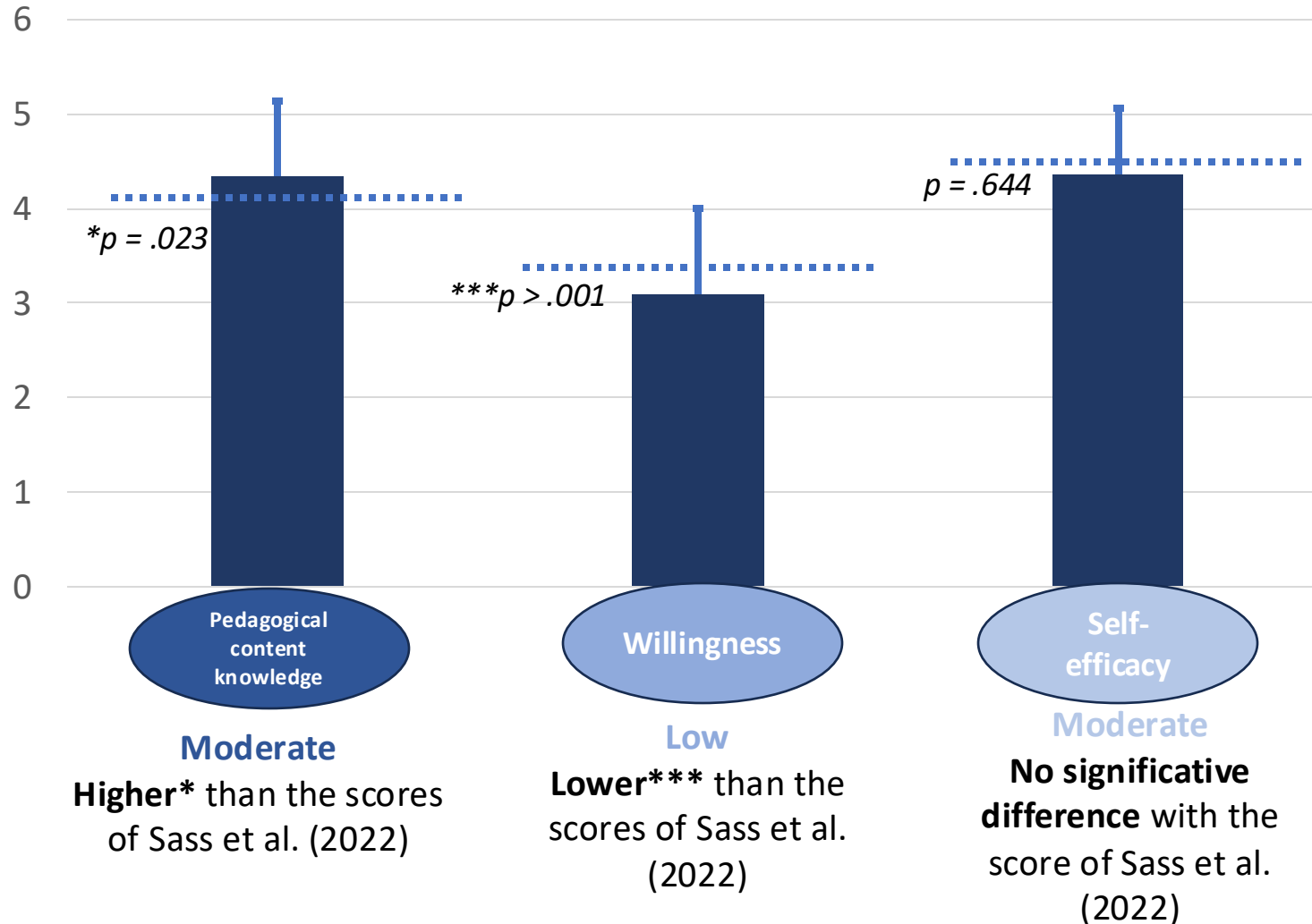
Descriptive statistics and one-sample t-tests



(1) Future PE teachers' PACesd level



Descriptive statistics and one-sample t-tests



..... Teachers' scores in the study by Sass et al. (2022)
One-sample t-tests

Moderate
Higher* than the scores of Sass et al. (2022)

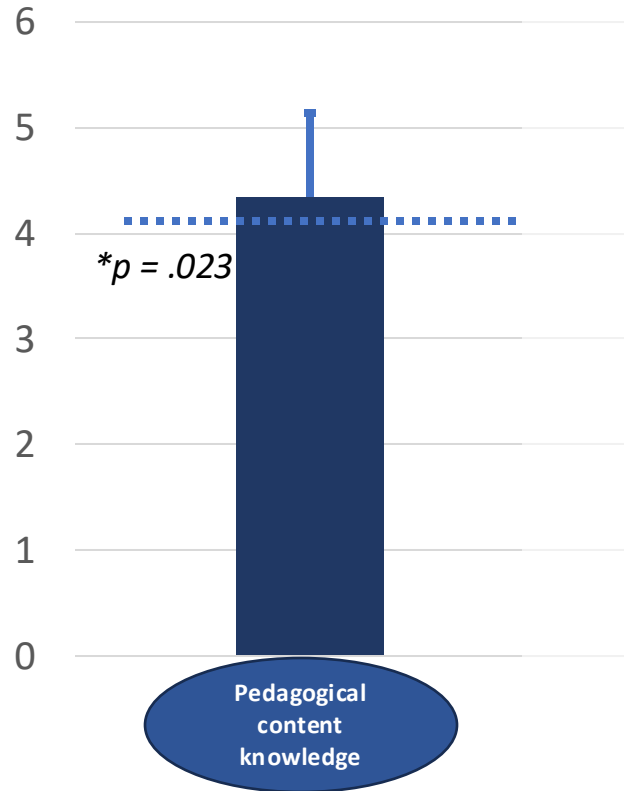
Low
Lower*** than the scores of Sass et al. (2022)

Moderate
No significant difference with the score of Sass et al. (2022)

(1) Future PE teachers' PACesd level



Descriptive statistics and one-sample t-test



Moderate
Higher* than the scores of Sass et al. (2022)

Sustainability

Focus on ecological dimension

Lack of temporal scale and spatial scale

Individual action level

Education for Sustainability

PEDAGOGICAL
Instrumental EfS more than emancipatory

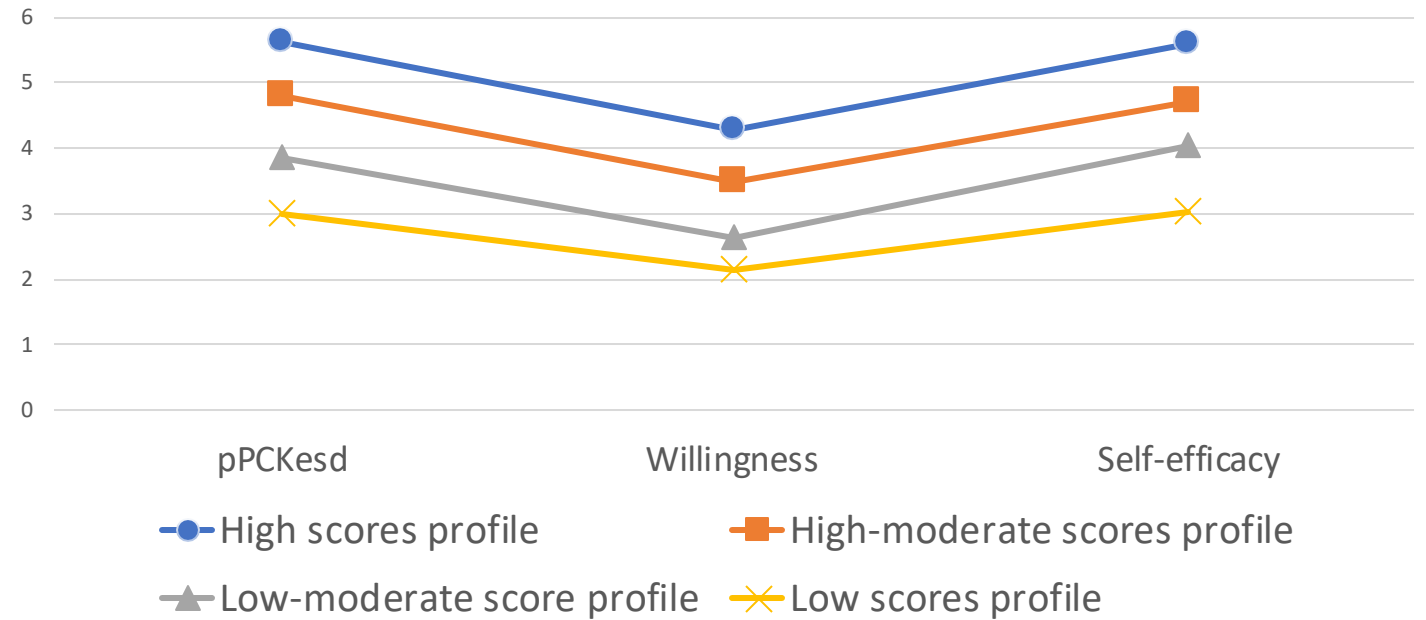
CONTENTS
Focus on ecological dimension
Lack of temporal scale and spatial scale
Individual action level



(2) Future PE teachers' PACesd profile



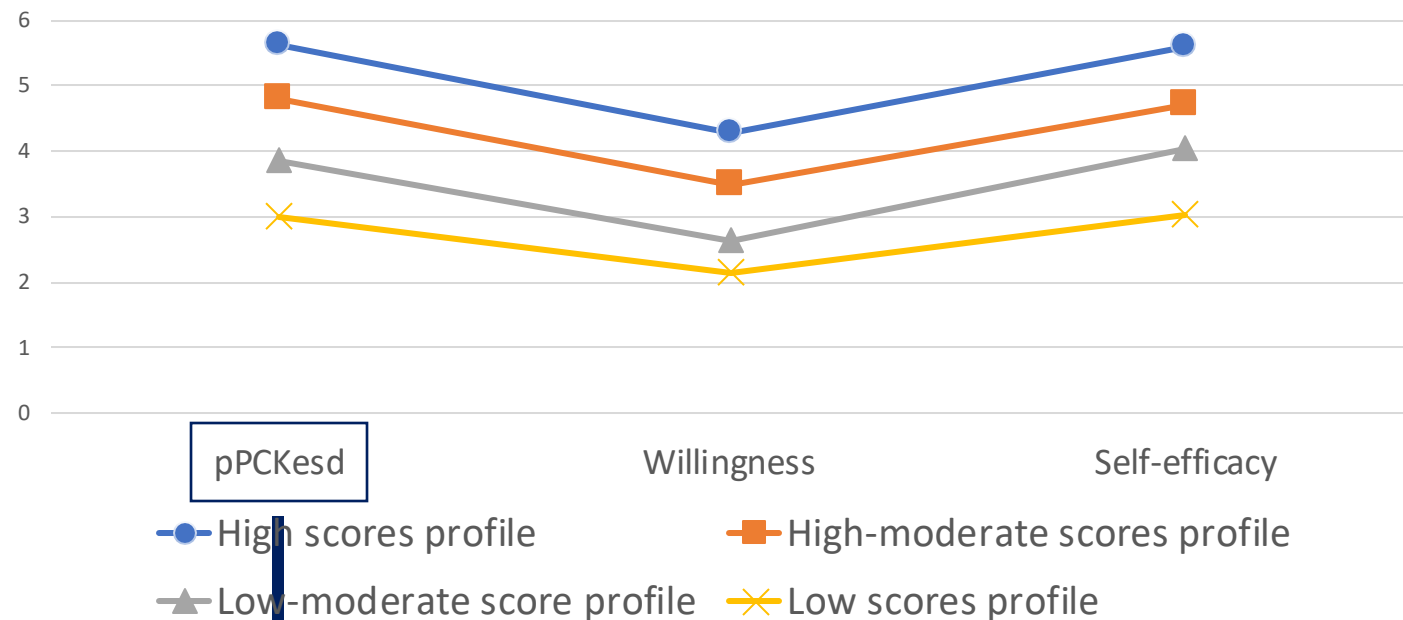
Scores of PACesd profiles



(2) Future PE teachers' PACesd profile



Scores of PACesd profiles



pPCKesd

Willingness

Self-efficacy

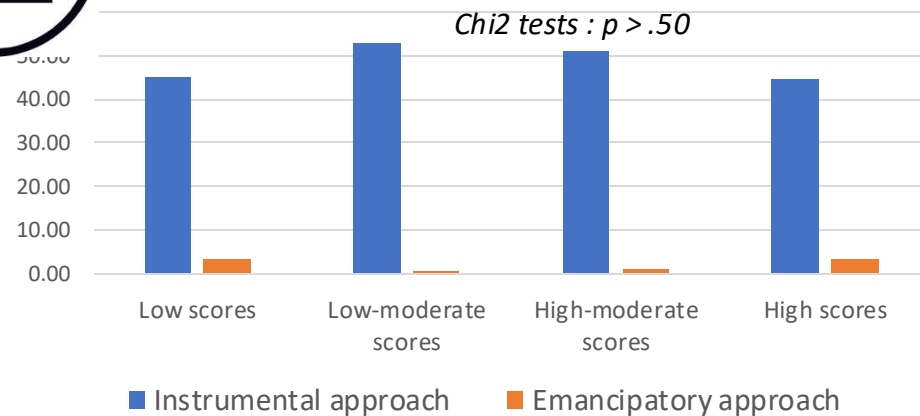
- High scores profile
- High-moderate scores profile
- ▲ Low-moderate score profile
- ✕ Low scores profile



(2) Future PE teachers' PACesd profile



Efs approach of potential implementations among PACesd profiles

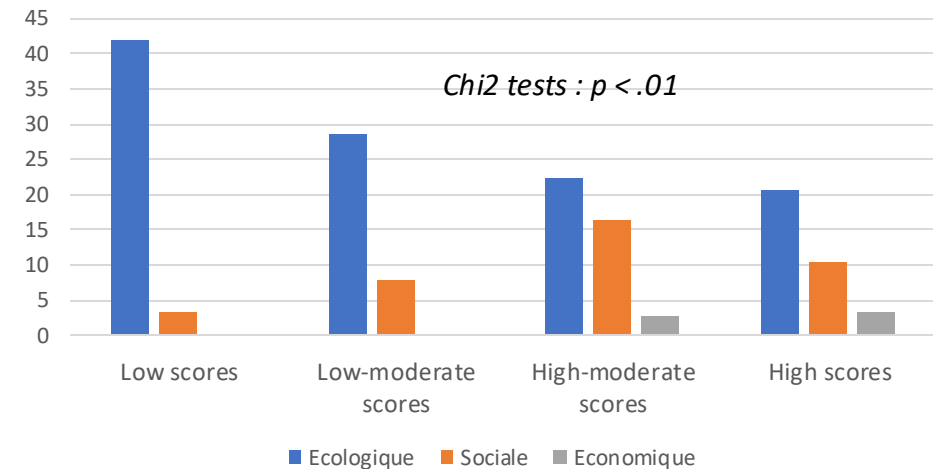


Potential implementation of Efs in PE



Absence of significant difference among profiles

Dimensions of Efs in PE among profiles



Theoretical knowledge about the **concept** of sustainability and Efs mainly consistent with quantitative profiles



Introduction

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Conclusion

Pedagogical
content
knowledge

Willingness

Self-efficacy

Difference between self-reported
and external-assessment levels

Low levels for future PE teachers

Scores similar to those of other
teachers

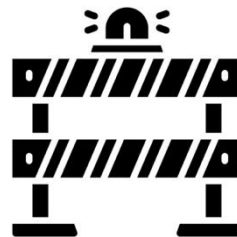
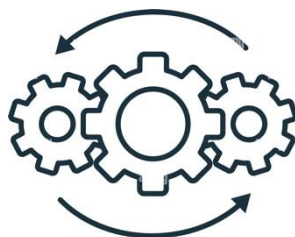


A need for pre-service and in-
service training with
sustainability & EfS contents

Necessity to identify **levers and
barriers** to implement EfS in PE

Surprising, considering the lack
of training in the theme: a need
for qualitative data and
triangulation

Pedagogy of EfS in PE





**THANK YOU
FOR YOUR
ATTENTION**



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hep/ haute
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ECOLE
DOCTORALE
Sciences du
Mouvement
Humain

Ampiric
Pôle pilote de formation des enseignants
et de recherche pour l'éducation

amU
Aix
Marseille
Université

INSPÉ
Institut national
supérieur du professorat
et de l'éducation
d'Aix-Marseille



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BANQUE des
TERRITOIRES



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