

## "EP - Active Living"

### Evaluation of the usefulness, usability, and acceptability of a mobile application designed for upper secondary school PE

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#### Background

- ✓ New technologies in PE may increase students' awareness, knowledge and motivation toward its life-long learning objectives and missions <sup>1,2</sup>
- ✓ Dedicated smartphone apps used in the context of PE could support out-of-school transfer of learnings toward active lifestyle habits <sup>3,4</sup>
- ✓ PE teachers should be provided with additional pedagogical tools as the French Community of Belgium curriculum is moving towards PE & Health <sup>5</sup>

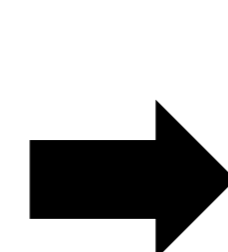
#### Objectives

- Among PE professionals
- ✓ Explore the usefulness, usability, and acceptability
  - ✓ Evaluate the pedagogical adequation of each feature
- Of the mobile application "EP - Active Living"

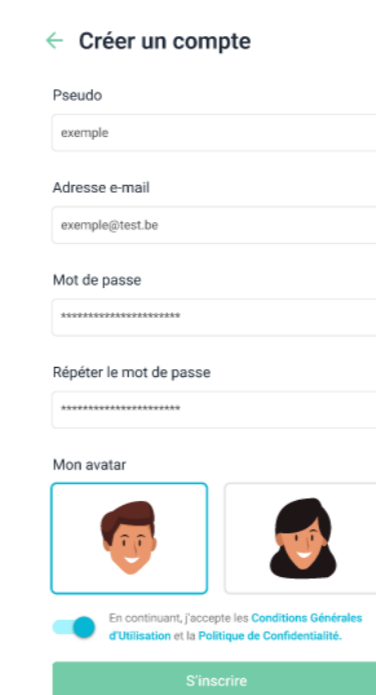
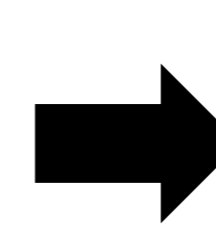
#### Methods



26 secondary level education PE teachers  
7 PETE university experts  
2 psycho-pedagogues  
1 secondary level education inspector



Online video instructions



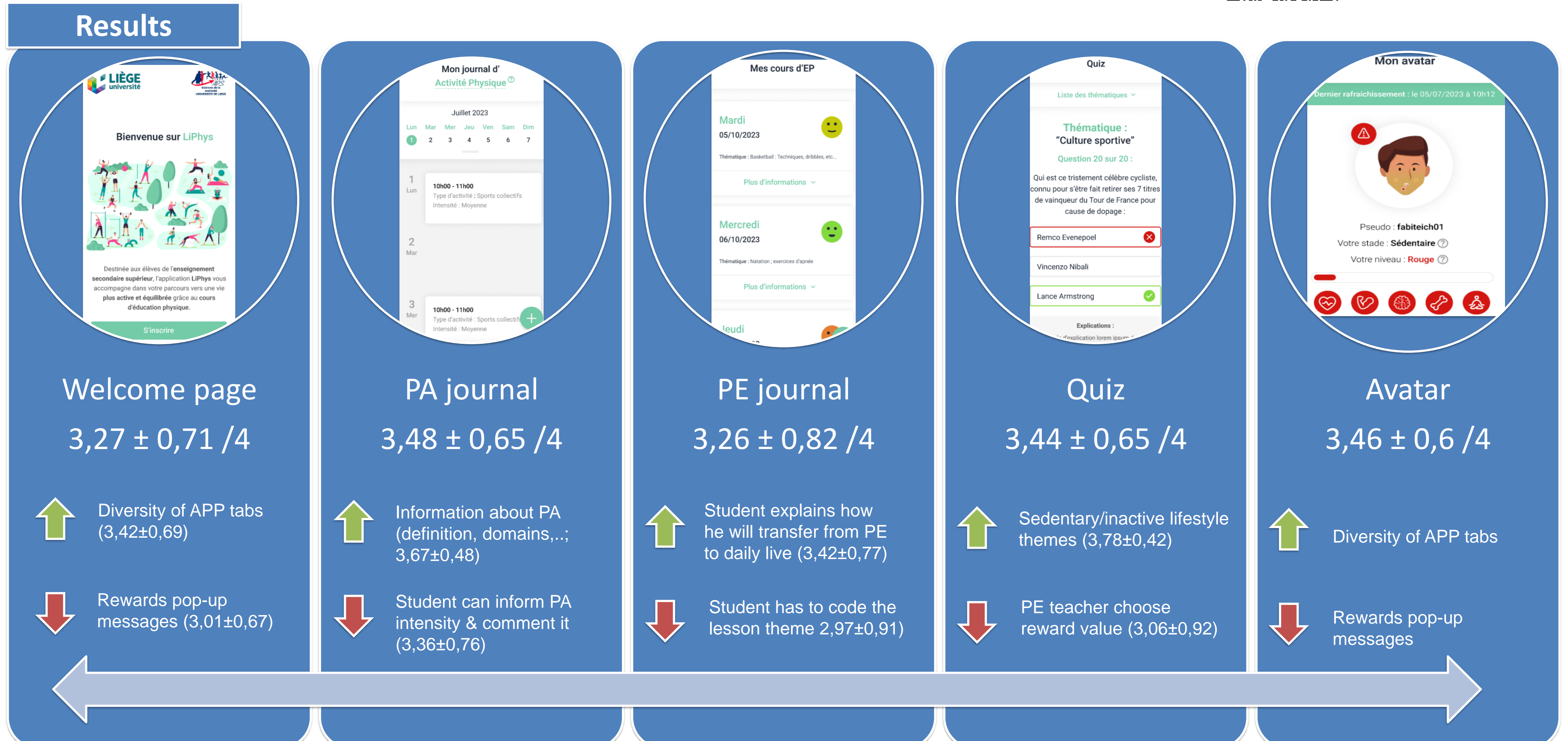
Beta APP testing



Online Assessment Questionnaire

Look what experts have seen on the APP !

#### Results



#### Strengths

- Playful APP (n=28)
- Transfer from PE to daily life (n=17)
- Follow-up tool for PE teacher (n=11)
- Follow-up tool for the student (n=10)
- Avatar mirroring student activity (n=5)
- Quiz for general knowledge (n=4)

#### Weaknesses

- Repetitive coding tasks for students (n=15)
- Cheating risk about activities performed (n=9)
- Undefined rewarding system (n=4)
- App content creation locked for the PE teacher (n=3)

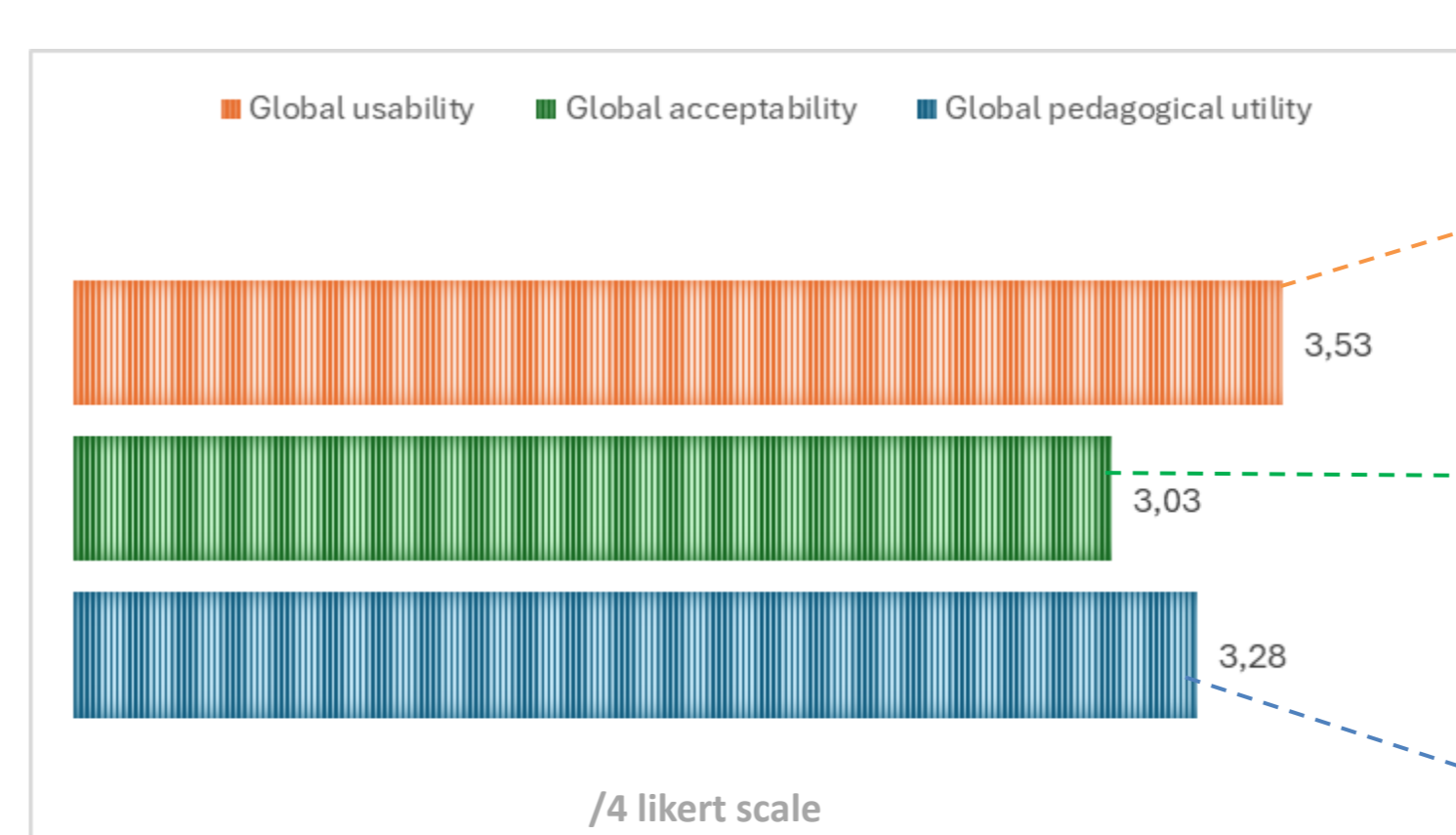
#### SWOT

#### Opportunities

- Extra pedagogical tool for the PE teacher (n=6)
- Interactions teacher-student and bridge between PE and daily life (n=6)

#### Threats

- Students' lack of long-term implication (n=11)
- PE teachers' lack of long-term implication (n=8)
- Risk of technical issues (n=5)



"Extrinsic motivation might not help to achieve long-term PE/PA goals"

"Engaging principals, parents, other teachers in the APP acceptability process is important"

"We have the responsibility as PE teacher to motivate students to use it in and out-of-school"

#### Discussion

- ✓ The "EP - Active Living" reaches good usefulness, usability, and acceptability levels
- ✓ Playfulness and focus on transfer from PE to daily live are the major strengths of the APP
- ✓ Some specific features of the APP could be adjusted to:
  - Move from an extrinsic to an intrinsic-oriented reward system <sup>6</sup>
  - Allow the student with more autonomy in the PA journal completion to meet his fundamental needs <sup>7</sup>
  - Allow the student more autonomy in the PA journal completion, or in the choice of keeping some of his data anonymous or not to meet his fundamental needs <sup>8</sup>
  - Expand the use of the avatar to social support and challenge-oriented purposes <sup>9</sup> (let's boost our avatars together!)

