

## **Abstract for AIESEP 2019**

Sub-theme: Physical education and physical literacy

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### **Impact of digital technologies on students' motivation in physical education within the guided discovery teaching style**

**Background and purpose:** Many researchers have demonstrated the positive effects of digital technologies on students' motivation when they were supported by a pedagogical approach (Casey, Goodyear & Armour, 2017). The purpose of this study was to examine the impact of a student-centred teaching style, coupling with digital technologies, on students' contextual and situational motivation.

**Methods:** The participants were 118 secondary school students ( $M = 16.39$ ,  $SD = 0.64$ , 100% girls, 16-18 years) who were randomly allocated to two groups: (a) an experimental group in which 81 students practiced an Acrogym unit within the guided discovery teaching style (Mosston & Ashworth, 2002) and with digital technologies, and (b) a control group in which 37 students practiced the same Acrogym unit within the command teaching style and without digital technologies. Students responded to questionnaires related to their contextual motivation pre and post-implementation (achievement goal theory and expectancy-value theory), and to their situational motivation (situational interest theory) at the beginning and at the end of the Acrogym unit.

**Results:** Students in the experimental group reported stable scores for their contextual motivation between pre and post-implementation, whereas the control group showed a decline. In addition, the situational motivation of the experimental group evolved more than those of the control group, indicating a stronger interest from the students towards the Acrogym unit.

**Conclusion and implications:** In conclusion, it seems that the digital technologies within the guided discovery teaching style are interesting to develop students' motivation and engagement in physical education.

#### References:

- Casey, A., Goodyear, V.A., & Armour, K.M. (2017). *Digital technologies and learning in physical education*. New York: Routledge.
- Mosston, M., & Ashworth, S. (2002). *Teaching physical education* (5<sup>th</sup> ed.). San Francisco, CA: Benjamin Cummings.