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Type: **Oral presentation**

## The role of academic engagement on freshmen's performance in an Introductory Physics course

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In this paper, we aim to understand the relationship between academic engagement and students' performance in the first university year, specifically in an introductory physics exam in the first semester of an engineering course. To this aim, we explored if the engagement dimensions have a differential effect on students' performance controlling also for high school background. Overall, 134 first-year university students (female students = 32.8%) participated in the study. A binary logistic regression was used to analyse data. Results show that among the engagement dimensions, peer interaction and university and relational network significantly affected the passing of the physics exam. However, the two dimensions have contrasting effects on students' performance. Our results suggest that the university context in which students find themselves can be more relevant for their performance with respect to the perceived value of chosen degree course.

### Education level

Age over 18 (excluding teacher education)

### Physics topic

Full curriculum

### Research focus

Students' identity, inclusion and wellbeing

### Research method

Analytic Physics Education Research (Quantitative research)

### Organizing preference criteria

Education level

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