

# Comunicaciones

## DO ACTIVE BREAKS INFLUENCE ATTENTION AND AFFECTIVE DIMENSIONS IN UNIVERSITY STUDENTS? ACTIVCLASS2UJI STUDY

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### ABSTRACT

**Introduction:** The implementation of classroom active breaks has been proposed as a strategy to integrate physical activity in educational environments, which has been shown to improve classroom behaviour and cognition at non-university educational levels (Daly-Smith et al., 2018). However, there is a dearth of knowledge about the effects of active breaks on university students' cognitive and affective performance. Thus, this pilot study aimed to analyse the acute effects of an active break in the lecture room on attention and affective dimensions in university students.

**Methods:** Twenty-eight university students (19.7±1.6 years; 28.6% girls) from the ActivClass2UJI (Active Classes to University Jaume I) study participated in this pilot analysis. Attention and affective dimensions were assessed before and after the intervention protocol using a within-participants cross-over design. Participants were allocated in random counterbalanced order in the active break condition, consisting of a 9min calisthenics body-weight interval exercise performed in the lecture room, and in the control condition, which entailed to be quietly sitting. Both conditions were carried out after two theoretical lectures (3h sitting). Attention was evaluated using the d2-R test (Brickenkamp et al., 2022). Positive affect and negative affect were measured through the Positive and Negative Affect Schedule

(Watson et al., 1988). Differences between groups were analysed using a 2 (control, exercise) x 2 (pre, post) repeated measures ANOVA.

**Results:** There were not significant differences between groups for the positive affect ( $F_{1,52}=1.22$ ,  $p=0.27$ ) and negative affect ( $F_{1,52}=2.21$ ,  $p=0.14$ ). Moreover, there were not significant differences between groups for attention dimensions of concentration ( $F_{1,52}=0.025$ ,  $p>0.88$ ), speed of work ( $F_{1,52}=0.09$ ,  $p>0.76$ ), and precision ( $F_{1,52}=0.05$ ,  $p>0.82$ ).

**Conclusions:** Our findings suggested a lack of influence of the active break performed on attention and affective dimensions in university students. Methodological issues, such as the sample size, physical activity dimensions, or individuals' characteristics, may explain this null effect.

**Keywords:** physical activity, cognition, emotions, young adults.

## REFERENCES

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