



Physical activity wristbands encourage more active behaviours among the school population, UGR study finds

23/11/2023

Research news

The research findings show that the use of these wearable physical activity monitors can help to encourage users to change their habits and overcome sedentary lifestyles



A study led by the Department of Physical Education and Sports at the University of Granada (UGR) has shown that activity wristbands can be an effective tool as a motivational strategy to promote changes in sedentary habits and behaviour among the school population.

The “School-Fit” project evaluated the progress of daily physical activity parameters based on several studies. One examined the validity of wristbands as a tool for measuring daily physical activity, while another measured the number of daily steps taken in relation to the WHO’s recommendation of 60 minutes of moderate-to-vigorous physical activity, and two intervention studies were conducted with primary school children and secondary school adolescents.

The results showed that physical activity data improved in all cases, with increases in daily steps (moderate physical activity) and (healthy) vigorous physical activity.

Useful tool to counter sedentary lifestyles

The researchers also found that the wristbands showed a high degree of validity and accuracy for measuring some of the physical activity variables they assessed (e.g. number of steps). They recommend their use as an intervention strategy to encourage changes in favour of more active behaviours, especially in school settings.

In this sense, the research team encourages physical education teachers to employ these wearable monitors to evaluate the results of intervention programmes aimed at meeting the daily physical activity recommendations set by education and health

authorities.

Until now, monitoring the daily physical activity of schoolchildren has been rather complicated. However, the use of these devices makes it possible to implement programmes to improve the data on the prevalence of sedentary lifestyles in classrooms at a relatively low cost.

The “School-Fit” project, financed by the University of Granada with additional support from the European Regional Development Fund (ERDF), was led by Jesús Viciano Ramírez, a professor at the UGR’s Department of Physical Education and Sports, together with professionals from several Spanish universities: Daniel Mayorga and Iván López (University of Málaga), Santiago Guijarro (University of Valladolid), and Carolina Casado, Juan Carlos de la Cruz and Ignacio Martín (University of Granada).

Contact details

Prof. Jesús Viciano Ramírez. Department of Physical Education and Sports
Telephone: +34 958 246 641
Email: @email

Full text of the study

Guijarro-Romero, S., Mayorga-Vega, D., Casado-Robles, C., & Viciano, J. (2023) Effect of an activity wristband-based intermittent teaching unit in Physical Education on students' physical activity and its psychological mediators: A cluster-randomized controlled trial. School-Fit study
Frontiers in Psychology. 14:1228925. doi: 10.3389/fpsyg.2023.1228925

Translated version: This text has been translated into English by the Language Services Unit (Vice-Rectorate for Internationalization) of the University of Granada.