







<https://doi.org/10.6063/motricidade.31667>

Abstract

Sport for All at ESECS - a pilot project with people with Intellectual and Developmental Disabilities (IDD)

Raul Antunes ^{1,2,3*}, Alexandra Curado¹, Diogo Monteiro ^{1,2,4}, Nuno Amaro ^{1,2},
Rui Matos ^{1,2}, Filipe Rodrigues ^{1,2}, Miguel Jacinto ^{1,2,5}

¹ ESECS—Polytechnic of Leiria, Portugal;

² Life Quality Research Centre (CIEQV), 2040-413 Leiria, Portugal

³ Center for Innovative Care and Health Technology (ciTechCare), Polytechnic of Leiria, Leiria, Portugal

⁴ Research Center in Sport Sciences, Health Sciences and Human Development (CIDESD), Vila Real, Portugal

⁵ Faculty of Sport Sciences and Physical Education, University of Coimbra, Coimbra, Portugal

*Email: raul.antunes@ipleiria.pt

Conflict of interest: nothing to declare. **Funding:** This research was funded by national funds through the Portuguese Foundation for Science and Technology. I.P. grant number UIDB/04748/2020 and grant number UID/04045/2020.

The relationship between the levels of autonomy and independence in people with Intellectual and Developmental Disabilities (IDD) and their levels of functional physical fitness is not clear in the literature. Thus, this study aimed to compare the levels of autonomy and functionality in daily living activities of people with IDD with their functional physical fitness levels and to analyse the effect of a 9-week physical exercise programme (one 1h session per week) on these variables. Seventeen adults (35.17 ± 13.57 years) with IDD participated in this study. Anthropometric data (height, weight, body mass index and muscle mass) and data regarding functionality of daily living activities

(WHODAS 2.0) were collected. The functional physical fitness was also assessed (handgrip strength, standing and sitting, and timed up and go test. There was an improvement in the daily living activities functionality ($z=-2.19$; $p=.03$) and body composition, namely in body mass index ($z=-2.08$; $p=.04$) and muscle mass ($z=-1.94$; $p=.05$) in the comparison between two moments. On the other hand, there were no differences in the functional physical fitness variables. Thus, the intervention program seems to have contributed positively to improving the perception of autonomy in daily living activities and body composition but was not enough to improve the participants' functional physical fitness.

Keywords: Intellectual and Developmental Disabilities; Autonomy; Independence; Functionality; Physical Fitness; Physical Exercise.

Acknowledgements: We would like to express our sincere gratitude to all the participants for their valuable contributions to this research study. All individuals included in this section have consented to the acknowledgement.