Usability of an application for smart phones to improve physical activity in people with intellectual disabilities.

Cuesta-Vargas AI[1] , Pérez-Cruzado D [1] , Morón-Fernández MJ[2], Luque-Giraldez R[2]

[1] *Departamento de Fisioterapia Universidad de Málaga, Málaga, España*

[2] *Department of Electronic Technologies, University of Malaga, Spain*

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Background

People with intellectual disabilities (ID) generally have a poor level of physical activity and poor adherence to this (Hughes et al., 2011). There have been some studies that use ICTs (Information Technology and Communication) to improve physical activity in other disabilities, but not in ID (Quilici et al., 2013). Usability involves ease in using a tool, so it is important to understand the usability of an application. In this study we will examine the usability of an application which is intended to improve physical activity in people with ID.

Method.

This is a prospective study. We installed an application onto the smart phones of people with ID, which was a reminder with some advice about physical activities that people with ID can use if they follow this advice. Usability was measured by SUS (System Usability Scale). This scale was based on a 10 item questionnaire with 5 possible answers. The total punctuation was between 0 and 100. We used this scale because it has been used in other studies and it has a high reliability (0.85).

Results and discussion.

We found there to be only limited usability for this application in people with ID, with a punctuation of 48,13 (±7,15). There are studies that measure the usability of mobile phones in people with ID (Stock, Davies, Wehmeyer and Palmer, 2008). However, to our knowledge, this is the first study to examine the usability of an application to improve physical activity in people with ID.

Conclussion.

The application to improve physical activity in people with ID had mild usability. This may reflect the difficulty that these people often have in using mobile phones and applications.

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* Correo electrónico del autor para correspondencia: acuesta@uma.es