O63. The use of wearable technology in a sample of Portuguese population

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INTRODUCTION

Wearable technology is increasing and have radically altered how we live our lives today. Personal wearable systems offer real-time feedback, (Lamont, Daniel, Payne, & Brauer, 2018) which enable people to evaluate several parameters: range of movement, meters or number of steps in a day, walking speed, burnt calories, heart rate, and sleeping hours and also give feedback on physical activity (Lamont et al., 2018). Despite the potential and the wide range of wearables available, there is little knowledge about the interest, usage and preferences for using wearables (Stephanie Alley & Mitch J Duncan, 2016), even the efficacy for using wearables in physical activity promotion. This study aimed to investigate the use of wearable technology in Portugal, in particular how often people use it and how they use it to monitor exercise/physical activity.

METHODS

Participants were N=1498 of both sexes (N = 841 females) aged between 14 and 85. Participants were recruited from schools, universities, clubs, work sites, and communities' settings across Portugal (North, Center, Lisbon, Alentejo, Algarve, Madeira and Azores islands). Interest, use and preferences for wearables devices were measured through a questionnaire (24 multiple-choice questions), based on a review of literature. The questionnaire was administered by the research in paper or using an online platform (website). In both cases, participants gave their informed consent. Statistics analyses were calculated with SPSS version 23 for Mac.

RESULTS

More than a half of the participants (57.1%) practice physical activity/exercise (walking/running/swimming or collective sports), and 36.1% practiced in the past. 30.6% of these 57.1% participants were female. Of the participants who practice physical activity, 37.3% (24.3% used) were using or have used wearable devices. The most frequently used device was a mobile application (22.2%), 11.1% used heart rate monitor and 11.4% used GPS. From the wearable device users, 9.7% think that it has allowed them to increase their physical activity, 3.2% at least more 1 hour/week, 3.7% more 1-2 hours/week, 1.8% more 3-4 hours/week, 0.9% more than 4 hours/week. Wearable device users considered exercise time (28.0%) and displacement time (25.6%) the most important functions, and time, frequency and intensity the most important wearable device characteristics. The main reasons for not using a device were 'uncomfortable" (26.6%) and 'high cost' (27.1%).

CONCLUSIONS

In conclusion, the majority of the participants who exercise regularly use wearable devices during the practice, which demonstrates some interest in using and the ones who do not have a device would like to own one.

References.
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