



POSTER

# MATCH: When Occupational Therapy meets with robotics and artificial intelligence

The good match between any person and his/her assistive technology(AT) is achieved through a complete assessment of significant occupations, capabilities, needs, and priorities in his/her life.

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**Introduction:** The good match between any person and his/her assistive technology (AT) is achieved through a complete assessment of significant occupations, capabilities, needs, and priorities in his/her life.

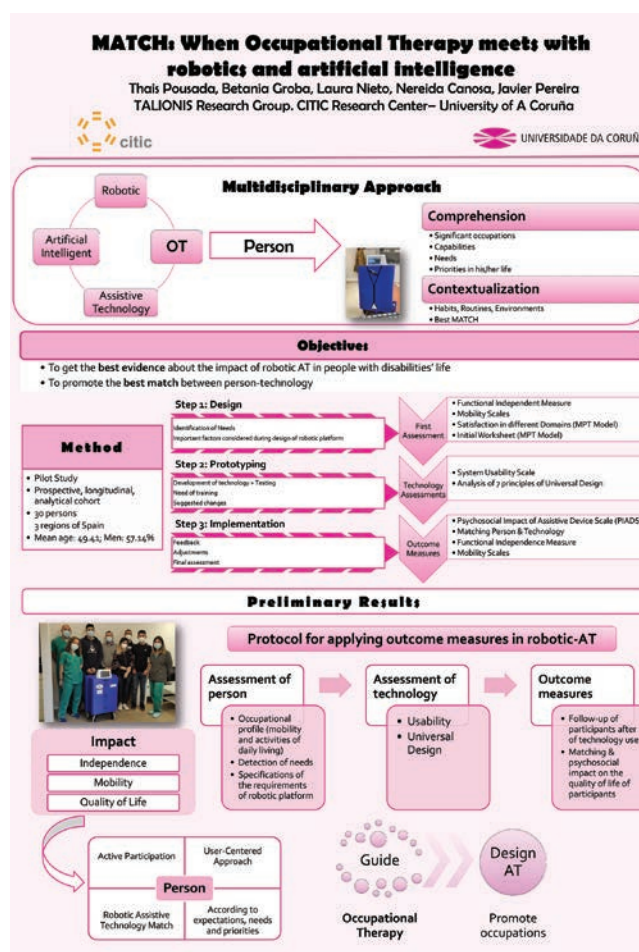
The present is multidisciplinary research that aims to develop novel Artificial Intelligence (AI) based robotic-AT to improve the independence and mobility of people with disabilities. The subproject led by occupational therapists (OT)-MATCH is focused on the implementation of outcome measures to improve the efficacy, effectiveness and real utility of AT in daily life.

**Objectives:** (1) to get the best evidence about the impact of robotic AT in the life of people with disabilities; (2) to promote the best match between person-technology.

**Method:** Pilot study: Prospective, longitudinal and analytical cohort. Sample was formed by 30 persons with disabilities from three Spanish regions, older than 25. To collect the data, outcome measures instruments (FIM, PIADS and MPT model), scales of usability and universal design and specific questionnaires were used.

**Results:** Robotic-AT based on AI was created; tested and used by participants. The impact of the devices in their lives was high, and results reflected differences with respect to age and level of mobility. A descriptive protocol of the application of outcome measures in robotic-AT was developed.

**Conclusion:** Active participation, with user-centered approach, allows defining and generating technological solutions that really adjust to the expectations, needs and priorities of users, to enhance their participation in the community. The role of OT in this



process is vital to guide the development of robotic AT promoting empowerment in occupations.



Access to the article with the Study Protocol.