



Call for Papers:
OTJR: Artificial Intelligence, Robotics, and Automation – A Special Edition

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In occupational therapy and occupational science, the enablement of participation in occupation is an approach to advance health and wellness. However, with increasing numbers of older adults and people with disabilities, and shortfalls in global healthcare systems and resources required to meet demanding population needs, new alternative approaches are needed in the delivery of occupational therapy and other services to support health and well-being.

In recent years there has been a significant increase in the role of technology to support people with disabilities across the lifespan, including older adults. Globally, people with disabilities are living longer, and there is an increased prevalence of neurodegenerative diseases such as Alzheimer's disease. The field of assistive technology has expanded beyond providing access to typical devices like wheelchairs, walkers, and canes, to include exposure to new technologies and approaches. As such, the occupational therapy profession is continuing to embrace new technologies into its scope of practice.

The role of advanced technologies like robots and smart homes is taking on a more predominate role in providing support to individuals who need assistance in daily activities and in maintaining their health, wellness, and independence. The onset of new advances in computer science and engineering, like artificial intelligence and automation, has led to development efforts on these types of technologies, and novel research being conducted on how these approaches can support occupational therapy practice. Likewise our society is facing a transportation revolution on the verge of launching autonomous and highly autonomous vehicles. Because driving and community mobility is an instrumental activity of daily living situated within the domain of occupational therapy practice, occupational therapy practitioners can make important contributions to assessing an individual's readiness for engaging with autonomous vehicles or providing interventions to enable such interactions.

This call for papers invites research and development projects or studies that consider the current and future role of advanced technologies in promoting occupation, participation and health.

Topics might include:

- New advanced systems for use in occupation, participation and health, including robotics, sensors, artificial intelligence, smart home systems, and other automated approaches.

- Clinical, pilot, and feasibility studies that have explored the role of such technologies in occupation, participation and health.
- Usability studies of new technologies with unique populations, such as older adults with dementia, children with autism, or family caregivers.
- Ethical and/or cultural issues pertaining to the use of advanced technologies in occupational therapy.
- The impact of characteristics such as gender, sexual orientation, socioeconomic status, age, and/or ethnicity on the use and adoption of advanced technologies.
- Critical analyses of the current field and the potential roles for advanced technologies in occupational therapy practice.
- The contributions of occupational therapy practitioners in the design and use of autonomous vehicles and autonomous vehicle fleets for client populations.

Discussions about advanced technologies and occupation are emergent and timely in occupational therapy and occupational science, and have much to offer in advancing scholarly dialogues that are important in these fields.

This special edition of *OTJR: Occupation, Participation and Health* invites scholarly investigations into the potential for technologies like robots, smart homes, sensors, and automated systems to advance occupational therapy practice and the occupational science field. We welcome papers that undertake rigorous empirical or conceptual investigations by inquiring into the links between occupational perspectives and occupational therapy practices as they relate to the use of such technologies.

Questions? Contact Dr. Sherrilene Classen sclassen@php.ufl.edu