

# Technology-Supported Independent Living for Adults With Developmental Disabilities

Shannon Turnley, Claire Morress, PhD, OTR/L, Ashlyn Denault, Isabel Ferreira, Grace Fuller, Lauren Winslow

Xavier University, Cincinnati, Ohio, United States

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Primary Author and Speaker: Shannon Turnley, [srturnley@gmail.com](mailto:srturnley@gmail.com)

Adults with developmental disabilities (DD) often experience barriers to independent living. However, technology has shown to increase engagement, quality of life, and independent living skills (Jamwal et al., 2020; Kerssens et al., 2015; Owuor & Larkan, 2017). This three year longitudinal descriptive study examined the effectiveness of a smart home in increasing performance and satisfaction of independent living skills, while reducing caregiver costs, for adults with DD. Participants were four adult males with DD living in a smart home, and their caregivers. This study utilized the Canadian Occupational Performance Measure (COPM), caregiver logs, and cost data analysis to obtain results over three years. Results were analyzed using descriptive statistics. The results showed clinically significant increases in average COPM performance and satisfaction scores over the three years for all residents' self-identified tasks. Furthermore, the hours of direct caregiving decreased by 75%, which resulted in a decrease in cost of caregiving. Smart homes have the potential to decrease cost and improve independent living for individuals with DD and their caregivers. The specific technology utilized by the individuals, the frequency of technology use, and the direct cause of improvement in performance should be further researched. This research is important for expanding independent living options for adults with DD and supporting the creation of other smart homes. Occupational therapist should understand how technology can influence performance and satisfaction of specified tasks for individuals with DD.

## References

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