

Promoting Independence Through Effective Interventions For Adults with ALS

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PICO: What are effective occupational therapy interventions for adults with ALS to improve participation in ADLs/IADLs?

Methods:

- The databases used in our literature search were: PubMed, CINHAL, and SCOPUS
- Number of articles critiqued and used for review: 9

Results: Themes

1. Assistive Technology (n=6)
 - a. Communication Management (n=6)
 - b. Leisure (n=4)
 - c. Quality of Life (n=1)
2. Impact on Caregiver (n=3)
3. Adaptive Equipment (n=2)

Theme(s)	Level of evidence	Citation	Intervention	Results
1a, 1c, 2	II	Hwang, H., Weng, O., Wang, I., Tsai, H., & Chang, A. (2014)	Eye-tracking assistive device	Clinically relevant Statistically significant
1a, 2	II	Londral, A., Pinto, A., Pinto, S., Azevedo, L., & De Carvalho, M. (2015)	Text-to-speech assistive device	Clinically relevant Statistically significant
1a, 1b	III	Lancioni, I., Simone, S., De Caro, A., Singh, I., O'Reilly, A., Sigafoos, E., ... Zonno, A. (2015)	Technology program for text messaging and leisure activities	Clinically relevant
1a, 1b	IV	Lancioni, G.E., Singh, N.N., O'Reilly, M.F., Sigafoos, J., Ferlisi, G., Ferrarese, G., Zillow, V., Addante, L.M., Spica, A., & Oliva, D. (2012)	Technology program on texting, videophone game, leisure engagement, and requests	Clinically relevant

1a, 1b	IV	Lancioni, G.E., Singh, N.N., O'Reilly, M.F., Sigafoos, J., D'Amico, F., Ferlisi, G., Zullo, V., Denitto, F., Laut, E., Abbinante, C., & Pesce, C.V. (2017)	Computer system with microswitch	Clinically relevant Statistically significant
1a, 1b	IV	Lancioni, G.E., Singh, N.N., O'Reilly, M.F., Ferlisi, G., Blotta, I., Ricci, I., Spica, A., & Oliva, D. (2012)	Optic microswitch and computer interface	Clinically relevant
2	III	Kavanaugh, M.S., Cho, C.C., & Howard, M. (2019)	Interviews on youth caregiver perspectives	Clinically relevant
3	IV	Connors, K.A., Mahony, L.M., & Morgan, P. (2019)	Adaptive equipment	Clinically relevant Statistically significant
3	V	Tanaka, K., Horaiya, K., Akagi, J., & Kihoin, N (2014)	Hand orthosis	Clinically relevant

Results: Themes Indicated

- Moderate evidence that technology can improve
 - Communication Management
 - Leisure Participation
 - QOL
- Moderate evidence of the need for training programs for youth caregivers
- Low level evidence using hand orthoses to improve ADL's

Please feel free to contact the authors for any questions or comments at krk008@jefferson.edu. Thank you.

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