



ÁREA DE DOCUMENTACIÓN

CENTRO DE REFERENCIA ESTATAL DE ATENCIÓN A PERSONAS CON ENFERMEDAD DE ALZHEIMER Y OTRAS DEMENCIAS IMSERSO.

REALIDAD VIRTUAL EN PERSONAS CON ALZHÉIMER O DEMENCIA

Referencias bibliográficas

- Adi, M. N. y Aljunaidy, M. M. (2020). The usefulness of using virtual reality to assess elderly and dementia friendly hospital design. *International Design and Art Journal*, 2(1), 1-14. <https://idajournal.com/index.php/ida/article/view/31>
- Appel, L., Ali, S., Narag, T., Mozeson, K., Pasat, Z., Orchanian-Cheff, A. y Campos, J. L. (2021). Virtual reality to promote wellbeing in persons with dementia: a scoping review. *Journal of Rehabilitation and Assistive Technologies Engineering*, 8, 1-16. <https://doi.org/10.1177/20556683211053952>
- Cibeira, N., Lorenzo-López, L., Maseda, A., López-López, R., Moreno-Peral, P. y Millán-Calenti, J. C. (2020). Realidad virtual como herramienta de prevención, diagnóstico y tratamiento del deterioro cognitivo en personas mayores: revisión sistemática. *Revista Neurología*, 71(6), 205-212. <https://doi.org/10.33588/rn.7106.2020258>
- Clay, F., Howett, D., FitzGerald, J., Fletcher, P., Chan, D. y Price, A. (2020). Use of immersive virtual reality in the assessment and treatment of Alzheimer's disease: a systematic review. *Journal of Alzheimer's Disease*, 75(1), 23-43. <https://doi.org/10.3233/JAD-191218>
- Cushman, L. A., Stein, K. y Duffy, .C. J. (2008). Detecting navigational deficits in cognitive aging and Alzheimer disease using virtual reality. *Neurology*, 71(12), 888-895. <https://doi.org/10.1212/01.wnl.0000326262.67613.fe>
- Davis, R. (2021). The feasibility of using virtual reality and eye tracking in research with older adults with and without Alzheimer's disease. *Frontiers in Aging Neuroscience*, 13, 1-8. <https://doi.org/10.3389/fnagi.2021.607219>



- D'Cunha, N. M., Nguyen, D., Naumovski, N., McKune, A. J., Kellett, J., Georgousopoulou, ... e Isbel, S. (2019). A mini-review of virtual reality-based interventions to promote well-being for people living with dementia and mild cognitive impairment. *Gerontology*, 65(4), 430-440. <https://doi.org/10.1159/000500040>
- Díaz-Orueta, U., Climent, G., Cardas-Ibález, J., Alonso, L., Olmo-Osa, J. y Tirapu-Ustároz, J. (2016). Evaluación de la memoria mediante realidad virtual: presente y futuro. *Revista de Neurología*, 62(2), 75-84. <https://doi.org/10.33588/rn.6202.2015453>
- Díaz Pérez, E. y Flórez Lozano, J. A. (2018). Realidad virtual y demencia. *Revista de Neurología*, 66(10), 344-352. <https://doi.org/10.33588/rn.6610.2017438>
- Eisapour, M., Cao, S. y Boger, J. (2020). Participatory design and evaluation of virtual reality games to promote engagement in physical activity for people living with dementia. *Journal of Rehabilitation and Assistive Technologies Engineering*, 7, 1-14. <https://doi.org/10.1177/2055668320913770>
- Ferguson, C., Shade, M. Y., Boron, J. B., Lyden, E. y Manley, N. A. (2020). Virtual reality for therapeutic recreation in dementia hospice care: a feasibility study. *American Journal of Hospice and Palliative Medicine*, 37(10), 809-815. <https://doi.org/10.1177/1049909120901525>
- Flynn, A., Barry, M., Koh, W. Q., Reilly, G., Brennan, A., Redfern, S. y Casey, D. (2022). Introducing and familiarising older adults living with dementia and their caregivers to virtual reality. *International Journal of Environmental Research and Public Health*, 19(23), 1-22. <https://doi.org/10.3390/ijerph192316343>
- Flynn, A., Healy, D., Houghton, C. y Casey, D. (2021). Key stakeholders' experiences and perceptions of virtual reality for older adults living with dementia: a qualitative evidence synthesis protocol. *International Journal of Qualitative Methods*, 20, 1-6. <https://doi.org/10.1177/1609406921995303>
- Gago, M. F., Yelshyna, D., Bicho, E., Silva, H. D., Rocha, L., Rodrigues, M. L. y Sousa, N. (2016). Compensatory postural adjustments in an oculus virtual reality environment and the risk of falling in Alzheimer's disease. *Dementia and Geriatric Cognitive Disorders Extra*, 6(2), 252-267. <https://doi.org/10.1159/000447124>

- García-Betances, R. I., Arredondo Waldmeyer, M. T., Fico, G. y Cabrera-Umpiérrez, M. F. (2015). A succinct overview of virtual reality technology use in Alzheimer's disease. *Frontiers in Aging Neuroscience*, 7, 1-8. <https://doi.org/10.3389/fnagi.2015.00080>
- Gambella, E., Margaritini, A., Benadduci, M., Rossi, L., D'Ascoli, P., Riccardi, G. R., ... y Maranesi, E. (2022). An integrated intervention of computerized cognitive training and physical exercise in virtual reality for people with Alzheimer's disease: the jDome study protocol. *Frontiers in Neurology*, 13, 1-16. <https://doi.org/10.3389/fneur.2022.964454>
- Gilmartin-Thomas, J., McNeil, J., Powell, A., Malone, D. T., Larson, I. C., O'Reilly, C. L., ... y Bell, J. S. (2020). Qualitative evaluation of how a virtual dementia experience impacts medical and pharmacy students' self-reported knowledge and attitudes towards people with dementia. *Dementia*, 19(2), 205-220. <https://doi.org/10.1177/1471301218770270>
- Gilmartin-Thomas, J., McNeil, J., Powell, A., Malone, D. T., Wolfe, R., Larson, I. C., ... y Bell, J. S. (2018). Impact of a virtual dementia experience on medical and pharmacy students' knowledge and attitudes toward people with dementia: a controlled study. *Journal of Alzheimer's Disease*, 62(2), 867-876. <https://doi.org/10.3233/JAD-170982>
- Gomis, B. (2019). *Intervención sobre la ansiedad en la demencia tipo Alzheimer mediante realidad virtual*. (Trabajo Fin de Grado). Universidad de Almería, Andalucía. <http://repositorio.ual.es/handle/10835/7939>
- Hirt, J. y Beer, T. (2020). Use and impact of virtual reality simulation in dementia care education: a scoping review. *Nurse Education Today*, 84, 1-8. <https://doi.org/10.1016/j.nedt.2019.104207>
- Imaoka, Y., Saba, N., Vanhoestenberghe, A. y Bruun, E. D. (2020). Triggering postural movements with virtual reality technology in healthy young and older adults: a cross-sectional validation study for early dementia screening. *Frontiers in Medicine*, 7, 1-17. <https://doi.org/10.3389/fmed.2020.533675>
- Jones, C., Jones, D. y Moro, C. (2021). Use of virtual and augmented reality-based interventions in health education to improve dementia knowledge and attitudes: an integrative review. *BMJ Open*, 11(11), 1-9. <http://dx.doi.org/10.1136/bmjopen-2021-053616>



- Jütten, L. H., Mark, R. E. y Sitskoorn, M. M. (2019). Can the mixed virtual reality simulator into D'mentia enhance empathy and understanding and decrease burden in informal dementia caregivers? *Dementia and Geriatric Cognitive Disorders Extra*, 8(3), 453-466. <https://doi.org/10.1159/000494660>
- Kim, D. (2021). Development and effect of virtual reality practice program for improving practical competency of caregivers specializing in dementia. *Healthcare*, 9(10), 1-20. <https://doi.org/10.3390/healthcare9101390>
- Kim, O., Pang, Y. y Kim, J. (2019). The effectiveness of virtual reality for people with mild cognitive impairment or dementia: a meta-analysis. *BMC Psychiatry*, 19(1), 1-10. <https://doi.org/10.1186/s12888-019-2180-x>
- Kruse, C. S., Sen, K., Armenta, V., Hubbard, N. y Brooks, R. (2022). Leveraging mHealth and virtual reality to improve cognition for Alzheimer's patients: a systematic review. *Healthcare*, 10(10), 1-25. <https://doi.org/10.3390/healthcare10101845>
- Manera, V., Chapoulie, E., Bourgeois, J., Guerchouche, R., David, R., Ondrej, J., ... y Robert, P. (2016). A feasibility study with image-based rendered virtual reality in patients with mild cognitive impairment and dementia. *PLoS ONE*, 11(3), 1-14. <https://doi.org/10.1371/journal.pone.0151487>
- Matsangidou, M., Frangoudes, F., Hadjiaros, M., Schiza, E., Neokleous, K. C., Papayianni, E., ... y Pattichis, C. S. (2022). "Bring me sunshine, bring me (physical) strength": the case of dementia. Designing and implementing a virtual reality system for physical training during the COVID-19 pandemic. *International Journal of Human-Computer Studies*, 165, 1-15. <https://doi.org/10.1016/j.ijhcs.2022.102840>
- Matsangidou, M., Frangoudes, F., Schiza, E., Neokleous, K. C., Papayianni, E., Xenari, K., ... y Pattichis, C. S. (2023). Participatory design and evaluation of virtual reality physical rehabilitation for people living with dementia. *Virtual Reality*, 27, 421-438. <https://doi.org/10.1007/s10055-022-00639-1>
- Matsangidou, M., Solomou, T., Frangoudes, F., Ioannou, K., Theofanous, P., Papayianni, E. y Pattichis, C. S. (2023). Affective out-world experience via virtual reality for older adults living with mild cognitive impairments or mild dementia. *International Journal of Environmental Research and Public Health*, 20(4), 1-15. <https://doi.org/10.3390/ijerph20042919>

- Mendez, M. F., Joshi, A. y Jimenez, E. (2014). Virtual reality for the assessment of frontotemporal dementia, a feasibility study. *Disability and Rehabilitation: Assistive Technology*, 10(2), 160-164. <https://doi.org/10.3109/17483107.2014.889230>
- Moon, H. J., Choi, Y. R. y Lee, S. K. (2014). Effects of virtual reality cognitive rehabilitation program on cognitive function, physical function and depression in the elders with dementia. *Journal of International Academy of Physical Therapy Research*, 5(2), 730-737. <https://doi.org/10.5854/JIAPTR.2014.10.31.730>
- Moyle, W., Jones, C., Dwan, T. y Petrovich, T. (2018). Effectiveness of a virtual reality forest on people with dementia: a mixed methods pilot study. *Gerontologist*, 58(3), 478-487. <https://doi.org/10.1093/geront/gnw270>
- Oliveira, J., Gamito, P., Souto, T., Conde, R., Ferreira, M., Corotnean, T., ... y Neto, T. (2021). Virtual reality-based cognitive stimulation on people with mild to moderate dementia due to Alzheimer's disease: a pilot randomized controlled trial. *International Journal of Environmental Research and Public Health*, 18(10), 1-13. <https://doi.org/10.3390/ijerph18105290>
- Papaioannou, T., Voinescu, A., Petrini, K. y Stanton Fraser, D. (2022). Efficacy and moderators of virtual reality for cognitive training in people with dementia and mild cognitive impairment: a systematic review and meta-analysis. *Journal of Alzheimer's Disease*, 88(4), 1341-1370. <https://doi.org/10.3233/JAD-210672>
- Reynolds, L., Rodiek, S., Lininger, M. y McCulley, A. (2018). Can a virtual nature experience reduce anxiety and agitation in people with dementia? *Journal of Housing for the Elderly*, 32(2), 176-193. <https://doi.org/10.1080/02763893.2018.1431583>
- Riaz, W., Khan, Z. Y., Jawaid, A. y Shahid, S. (2021). Virtual reality (VR)-based environmental enrichment in older adults with mild cognitive impairment (MCI) and mild dementia. *Brain Sciences*, 11(8), 1-13. <https://doi.org/10.3390/brainsci11081103>
- Sánchez-Nieto, D., Castaño-Castaño, S., Navarro-Martos, R., Obrero-Gaitán, E., Cortés-Pérez, I. y Nieto-Escamez, F. (2023). An intervention on anxiety symptoms in moderate Alzheimer's disease through virtual reality: a feasibility study and lessons learned. *International Journal of Environmental Research and Public Health*, 20(3), 1-11. <https://doi.org/10.3390/ijerph20032727>

- Sayma, M., Tuijt, R., Cooper, C. y Walters, K. (2020). Are we there yet? Immersive virtual reality to improve cognitive function in dementia and mild cognitive impairment. *The Gerontologist*, 60(7), 502-512. <https://doi.org/10.1093/geront/gnz132>
- Sobral, M. y Pestana, M. H. (2020). Virtual reality and dementia: a bibliometric analysis. *The European Journal of Psychiatry*, 34(3), 120-131. <https://doi.org/10.1016/j.ejpsy.2020.04.004>
- Staggatt, J., Bhar, S., Petrovich, T., Bhowmik, J., Sykes, D. y Burns, K. (2021). The effects of virtual reality-based education on empathy and understanding of the physical environment for dementia care workers in Australia: a controlled study. *Journal of Alzheimer's Disease*, 84(3), 1247-1257. <https://doi.org/10.3233/JAD-210723>
- Strong, J. (2020). Immersive virtual reality and persons with dementia: a literature review. *Journal of Gerontological Social Work*, 63(3), 209-226. <https://doi.org/10.1080/01634372.2020.1733726>
- Tominari, M., Uozumi, R., Becker, C. y Kinoshita, A. (2021). Reminiscence therapy using virtual reality technology affects cognitive function and subjective well-being in older adults with dementia. *Cogent Psychology*, 8(1), 1-20. <https://doi.org/10.1080/23311908.2021.1968991>
- Walden, A. y Feliciano, L. (2022). A virtual reality intervention to reduce dementia-related agitation using single-case design. *Clinical Gerontologist*, 45(4), 1044-1054. <https://doi.org/10.1080/07317115.2021.1954121>
- Wijma, E. M., Veerbeek, M. A., Prins, M., Pot, A. M. y Willemse, B. M. (2018). A virtual reality intervention to improve the understanding and empathy for people with dementia in informal caregivers: results of a pilot study. *Aging & Mental Health*, 22(9), 1121-1129. <https://doi.org/10.1080/13607863.2017.1348470>
- Yamakawa, M., Sung, H. y Tungpunkom, P. (2020). Virtual reality education for dementia care: a scoping review protocol. *JBI Evidence Synthesis*, 18(9), 2075-2081. <https://doi.org/10.11124/JBISRIR-D-19-00230>

- Yun, S. J., Kang, M., Yang, D., Choi, Y., Kim, H., Oh, B. y Seo, H. G. (2020). Cognitive training using fully immersive, enriched environment virtual reality for patients with mild cognitive impairment and mild dementia: feasibility and usability study. *JMIR Serious Games*, 8(4), 1-9. <https://doi.org/10.2196/18127>
- Zajac-Lamparska, L., Wiłkość-Dębczyńska, M., Wojciechowski, A., Podhorecka, M., Polak-Szabela, A., Warchał, L., ... e Izdebski, P. (2019). Effects of virtual reality-based cognitive training in older adults living without and with mild dementia: a pretest-posttest design pilot study. *BMC Research Notes*, 12, 1-8. <https://doi.org/10.1186/s13104-019-4810-2>
- Zhu, K., Zhang, Q., He, B., Huang, M., Lin, R. y Li, H. (2022). Immersive virtual reality-based cognitive intervention for the improvement of cognitive function, depression, and perceived stress in older adults with mild cognitive impairment and mild dementia: pilot pre-post study. *JMIR Serious Games*, 10(1), 1-10. <https://doi.org/10.2196/32117>
- Zhu, S., Sui, Y., Shen, Y., Zhu, Y., Ali, N., Guo, C. y Wang, T. (2021). Effects of virtual reality intervention on cognition and motor function in older adults with mild cognitive impairment or dementia: a systematic review and meta-analysis. *Frontiers in Aging Neuroscience*, 13, 1-15. <https://doi.org/10.3389/fnagi.2021.586999>