

**UJI VALIDITAS DAN RELIABILITAS INSTRUMEN KEBUGARAN  $\frac{1}{2}$   
*MILE WALK TEST* ( $\frac{1}{2}$ MWT) PADA ORANG DENGAN DEMENSIA**

**SKRIPSI**

diajukan untuk memenuhi sebagian syarat untuk memperoleh gelar  
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### UJI VALIDITAS DAN RELIABILITAS INSTRUMEN KEBUGARAN $\frac{1}{2}$ MILE WALK TEST ( $\frac{1}{2}$ MWT) PADA ORANG DENGAN DEMENSIA

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## ABSTRAK

### UJI VALIDITAS DAN RELIABILITAS INSTRUMEN KEBUGARAN $\frac{1}{2}$ MILE WALK TEST ( $\frac{1}{2}$ MWT) PADA ORANG DENGAN DEMENSIA

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Penelitian ini bertujuan untuk mengetahui nilai validitas dan reliabilitas dari instrumen kebugaran  $\frac{1}{2}$  Mile Walk Test ( $\frac{1}{2}$ MWT) sebagai instrumen tes bagi orang dengan demensia. Metode yang digunakan adalah *Correlational Research* dengan desain penelitian *Explanatory Design*. Sampel dalam penelitian ini merupakan orang dengan demensia di RW 06 Kelurahan Padasuka Kecamatan Cibeunying Kidul Kota Bandung yang berjumlah 31 orang, dipilih menggunakan teknik pengambilan sampel *purposive sampling*. Instrumen yang digunakan adalah *6 Minute Walk Test* (6MWT) dan  $\frac{1}{2}$  Mile Walk Test ( $\frac{1}{2}$ MWT). Analisis data menggunakan *Pearson Correlation* untuk menguji validitas dan *Cronbach's Alpha* untuk menguji reliabilitas. Hasil analisis data menunjukkan bahwa instrumen kebugaran  $\frac{1}{2}$  Mile Walk Test ( $\frac{1}{2}$ MWT) memiliki nilai koefisien korelasi  $r = -0,657$  sehingga termasuk ke dalam kriteria validitas tinggi namun dengan arah hubungan yang negatif dan memiliki nilai reliabilitas  $r = 0,855$  sehingga termasuk ke dalam interpretasi reliabilitas yang sangat tinggi. Jadi, dapat disimpulkan bahwa instrumen kebugaran  $\frac{1}{2}$  Mile Walk Test ( $\frac{1}{2}$ MWT) valid dan reliabel sebagai instrumen tes bagi orang dengan demensia.

**Kata Kunci :**  $\frac{1}{2}$  Mile Walk Test, Demensia, Instrumen, Reliabilitas, Validitas

## ABSTRACT

### VALIDITY AND RELIABILITY TEST OF $\frac{1}{2}$ MILE WALK TEST ( $\frac{1}{2}$ MWT) FITNESS INSTRUMENT IN PEOPLE WITH DEMENTIA

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This study aims to determine the validity and reliability of  $\frac{1}{2}$  Mile Walk Test ( $\frac{1}{2}$ MWT) fitness instrument as a test instrument for people with dementia. The method used is Correlational Research with an Explanatory Design research design. The sample in this study were 31 people with dementia in RW 06 Padasuka Village, Cibeunying Kidul District, Bandung City, selected using purposive sampling technique. The instruments used are the 6 Minute Walk Test (6MWT) and  $\frac{1}{2}$  Mile Walk Test ( $\frac{1}{2}$ MWT). Data analysis used Pearson Correlation to test validity and Cronbach's Alpha to test reliability. The results of data analysis show that the fitness instrument  $\frac{1}{2}$  Mile Walk Test ( $\frac{1}{2}$ MWT) has a correlation coefficient value of  $r = -0.657$  so that it is included in the high validity criteria but with a negative direction of relationship and has a reliability value of  $r = 0.855$  so it is included in the very high reliability interpretation. So, it can be concluded that the  $\frac{1}{2}$  Mile Walk Test ( $\frac{1}{2}$ MWT) fitness instrument is valid and reliable as a test instrument for people with dementia.

**Keywords** :  $\frac{1}{2}$  Mile Walk Test, Dementia, Instrument, Reliability, Validity

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## DAFTAR PUSTAKA

- Arvanitakis, Z., C. Shah, R., & A. Bennett, D. (2019). *Diagnosis and Management of Dementia: Review*. 322(16), 1589–1599. <https://doi.org/10.1001/jama.2019.4782>
- Badan Pusat Statistik. (2018). *Statistik Indonesia 2018* (Subdirektorat Publikasi dan Kompilasi Statistik, ed.). Badan Pusat Statistik.
- Badan Pusat Statistik. (2019). *Statistik Penduduk Lanjut Usia 2019* (Subdirektorat Statistik Pendidikan dan Kesejahteraan Sosial, ed.). Badan Pusat Statistik.
- Bazzano, C., Cunningham, L. N., Cama, G., & Falconio, T. (1995). *Physiology of 1-Mile Walk Test in Older Adults*. 373–382. <https://doi.org/10.1123/japa.3.4.373>
- Boustani, M. (2014). *Dementia Screening in Primary Care: Not Too Fast!* 61(7), 1205–1207. <https://doi.org/10.1111/jgs.12319>
- C. Elliot, A., & A. Woodward, W. (2007). *Statistical Analysis Quick Reference Guidebook: With SPSS Examples*. Sage Publications.
- Chan, W. L. S., Pin, T. W., Lin, C., Elderly, N., Drive, C. L., Hill, D., & Kong, H. (2019). Reliability , validity and minimal detectable change of 2-minute walk test , 6- minute walk test and 10-meter walk test in frail older adults with dementia ☆. *Experimental Gerontology*, 115(November 2018), 9–18. <https://doi.org/10.1016/j.exger.2018.11.001>
- Clark, B. A. (1989). Tests for Fitness in Older Adults : AAHPERD Fitness Task Force. *Journal of Physical Education, Recreation & Dance*, 3084(April). <https://doi.org/10.1080/07303084.1989.10603976>
- Cronbach, L. J., & Gleser, G. C. (1959). Interpretation of Reliability and Validity Coefficients. *Journal of Educational Psychology*, 50(5), 230–237.
- Enright, P. L. (2003). The Six-Minute Walk Test. *Respiratory Science Center, College of Medicine*, 783–785.
- Enright, P. L., Mcburnie, M. A., Bittner, V., Tracy, R. P., Mcnamara, R., & Arnold, A. (2003). The 6-min Walk Test \* A Quick Measure of Functional Status in Elderly Adults. *CHEST*, 123(2), 387–398. <https://doi.org/10.1378/chest.123.2.387>
- Fernhall, B., Pitetti, K., Stubbs, N., & Stadler, L. (1996). Validity and Reliability of the 1/2-Mile Run-Walk as an Indicator of Aerobic Fitness in Children With Mental Retardation. *Pediatric Exercise Science*, 130–142. <https://doi.org/10.1123/pes.8.2.130>
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to Design and Evaluate Research in Education*. McGraw-Hill.
- Ganti, A. (2020). Correlation Coefficient. *Investopedia*.

- Ghasemi, A., & Zahediasl, S. (2012). *Normality Tests for Statistical Analysis: A Guide for Non-Statisticians* Asghar. 10(2), 486–489. <https://doi.org/10.5812/ijem.3505>
- Heale, R., & Twycross, A. (2015). *Validity and reliability in quantitative studies*. 18(3), 66–67.
- Jia, L., Quan, M., Fu, Y., Zhao, T., Li, Y., Wei, C., ... Wang, Y. (2020). Series Neurological diseases in China 3 Dementia in China : epidemiology , clinical management , and research advances. *The Lancet Neurology*, 19(1), 81–92. [https://doi.org/10.1016/S1474-4422\(19\)30290-X](https://doi.org/10.1016/S1474-4422(19)30290-X)
- Jones, C. J., & Rikli, R. E. (2002). Measuring functional. *The Journal on Active Aging*, (April), 24–30.
- Kales, H. C., Lyketsos, C. G., Miller, E. M., & Ballard, C. (2018). *Management of behavioral and psychological symptoms in people with Alzheimer ' s d isease : an international D elphi*. 1–8. <https://doi.org/10.1017/S1041610218000534>
- Langhammer, B., & Stanghelle, J. K. (2015). The Senior Fitness Test. *Journal of Physiotherapy*, 61(3), 163. <https://doi.org/10.1016/j.jphys.2015.04.001>
- Langhammer, B., & Stanghelle, J. K. (2018). Senior fitness test ; a useful tool to measure physical fitness in persons with acquired brain injury. *Brain Injury*, 00(00), 1–6. <https://doi.org/10.1080/02699052.2018.1540796>
- Mayorga Vega, D., Bocanegra Parrilla, R., Ornelas, M., & Viciano, J. (2016). *Criterion-Related Validity of the Distance- and Time-Based Walk / Run Field Tests for Estimating Cardiorespiratory Fitness : A Systematic Review and Meta-Analysis*. 1–24. <https://doi.org/10.1371/journal.pone.0151671>
- Messick, S. J. (1990). Validity of Test Interpretation and Use. *Educational Resources Information Center (ERIC)*.
- Nugroho, W. (2008). *Keperawatan Gerontik dan Geriatrik*.
- Orlická, E. (2015). Impact of Population Ageing and Elderly Poverty on Macroeconomic Aggregates . *Procedia Economics and Finance*, 30(15), 598–605. [https://doi.org/10.1016/S2212-5671\(15\)01272-1](https://doi.org/10.1016/S2212-5671(15)01272-1)
- Osness, H. W., M, A., B, C., W, H., D, R., & R, W. (1990). *Functional Fitness Assessment for Adults Over 60 Years (A Field Based Assessment)*. American Alliance for Health, Physical Education, Recreation and Dance (AAHPRED).
- Prince, M., Bryce, R., Albanese, E., Wimo, A., Ribeiro, W., & Ferri, C. P. (2013). The Global Prevalence of Dementia : A Systematic Review and Metaanalysis. *Alzheimer's & Dementia*, 9(1), 63-75.e2. <https://doi.org/10.1016/j.jalz.2012.11.007>
- Rahman, S. (2016). *Uji Validitas dan Reliabilitas Instrumen Kelincahan Balsom Agility Test untuk Atlet Sekolah Menengah Pertama Kelas Khusus Olahraga di Daerah Istimewa Yogyakarta*. 1–8.
- Rikli, R. E., & Jones, C. J. (1998). The Reliability and Validity of a 6-Minute Walk

Test as a Measure of Physical Endurance in Older Adults. *Journal of Aging and Physical Activity*. <https://doi.org/10.1123/japa.6.4.363>

Rumsey, D. J. (2016). How to Interpret A Correlation Coefficient r. *Statistics For Dummies*, 0–1.

Szabo-reed, A. N., Vidoni, E., Binder, E. F., Burns, J., Cullum, C. M., Gahan, W. P., ... Keller, J. N. (2019). Rationale and methods for a multicenter clinical trial assessing exercise and intensive vascular risk reduction in preventing dementia ( rrAD Study ). *Contemporary Clinical Trials*, 79(March), 44–54. <https://doi.org/10.1016/j.cct.2019.02.007>

Tavakol, M., & Dennick, R. (2011). *Making sense of Cronbach ' s alpha*. 53–55. <https://doi.org/10.5116/ijme.4dfb.8dfd>

Winarno, M. E. (2018). *Metodologi Penelitian dalam Pendidikan Jasmani*. Malang: Penerbit Universitas Negeri Malang (UM Press).

World Health Organization. (2011). *Global Health and Aging*. National Institutes of Health.