

DAFTAR PUSTAKA

- Aam, S. *et al.* (2020) 'Post-stroke Cognitive Impairment—Impact of Follow-Up Time and Stroke Subtype on Severity and Cognitive Profile: The Nor-COAST Study', *Frontiers in Neurology*, 11(July), pp. 1–10. doi: 10.3389/fneur.2020.00699.
- Ajčević, M. *et al.* (2021) 'Early EEG Alterations Correlate with CTP Hypoperfused Volumes and Neurological Deficit: A Wireless EEG Study in Hyper-Acute Ischemic Stroke', *Annals of Biomedical Engineering*, 49(9), pp. 2150–2158. doi: 10.1007/s10439-021-02735-w.
- Al-qazzaz, N. K. *et al.* (2014) 'Role of EEG as biomarker in the early detection and classification of dementia. - PubMed - NCBI', *Scientific World Journal*, 2014, pp. 1–17. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/25093211>.
- Aminov, A. *et al.* (2017) 'Acute single channel EEG predictors of cognitive function after stroke', *PLoS ONE*, 12(10), pp. 1–15. doi: 10.1371/journal.pone.0185841.
- Anom Rastiti, I., Zheng, H. L. and Chen, C. Le (2018) 'Electroencephalogram brain connectome: An approach in research to identify the effect of acupuncture on human brain wave', *World Journal of Traditional Chinese Medicine*, 4(3), pp. 127–133. doi: 10.4103/wjtc.wjtc_15_18.
- Article, S. (1997) 'Assessment of digital EEG , quantitative EEG , and EEG brain mapping ', *Neurology*, (September 1996), pp. 277–292.
- Auriat, A. M. *et al.* (2015) 'A review of transcranial magnetic stimulation and multimodal neuroimaging to characterize post-stroke neuroplasticity', *Frontiers in Neurology*, 6(OCT), pp. 1–20. doi: 10.3389/fneur.2015.00226.
- Babiloni, C. *et al.* (2020) 'International Federation of Clinical Neurophysiology (IFCN) – EEG research workgroup: Recommendations on frequency and topographic analysis of resting state EEG rhythms. Part 1: Applications in clinical research studies', *Clinical Neurophysiology*, 131(1), pp. 285–307. doi: 10.1016/j.clinph.2019.06.234.
- Baldassarre, A. *et al.* (2016) 'Dissociated functional connectivity profiles for motor and attention deficits in acute right-hemisphere stroke', *Brain*, 139(7), pp. 2024–2038. doi: 10.1093/brain/aww107.
- Basharpoor, S., Heidari, F. and Molavi, P. (2021) 'EEG coherence in theta, alpha, and beta bands in frontal regions and executive functions', *Applied Neuropsychology:Adult*, 28(3), pp. 310–317. doi: 10.1080/23279095.2019.1632860.
- Benjamin, E. J. *et al.* (2019) *Heart Disease and Stroke Statistics-2019 Update: A Report From the American Heart Association*, *Circulation*. doi: 10.1161/CIR.0000000000000659.
- Bian, Z. *et al.* (2014) 'Relative power and coherence of EEG series are related to amnesic mild cognitive impairment in diabetes', *Frontiers in Aging Neuroscience*, 6(FEB), pp. 1–9. doi: 10.3389/fnagi.2014.00011.
- Brady, M. C. and Evans, J. J. (2021) 'Language and Cognitive Rehabilitation after Stroke', in *Stroke Prevention and Treatment*. Second. New: Cambridge University Press, pp. 501–514.
- Buzsáki, G. (2002) 'Theta oscillations in the hippocampus', *Neuron*, 33(3), pp. 325–

340. doi: 10.1016/S0896-6273(02)00586-X.

Cantero, J. L. *et al.* (2003) 'Sleep-Dependent θ Oscillations in the Human Hippocampus and Neocortex', *Journal of Neuroscience*, 23(34), pp. 10897–10903. doi: 10.1523/jneurosci.23-34-10897.2003.

Caplan, L. R. (2016) 'Stroke Syndromes', in *Caplans's Stroke A Clinical Approach*. Fifth Edit. New York: Cambridge University, pp. 148–162.

Claesson, L. *et al.* (2005) 'Cognitive impairment after stroke - Impact on activities of daily living and costs of care for elderly people: The Göteborg 70+ stroke study', *Cerebrovascular Diseases*, 19(2), pp. 102–109. doi: 10.1159/000082787.

Cumming, T. B., Marshall, R. S. and Lazar, R. M. (2013) 'Stroke, cognitive deficits, and rehabilitation: Still an incomplete picture', *International Journal of Stroke*, 8(1), pp. 38–45. doi: 10.1111/j.1747-4949.2012.00972.x.

Demos, J. N. (2019) 'Getting Started With EEG Neurofeedback', *Getting Started With EEG Neurofeedback*. 2nd Editio. doi: 10.1017/CBO9781107415324.004.

Doerrfuss, J. I. *et al.* (2020) 'Quantitative and Qualitative EEG as a Prediction Tool for Outcome and Complications in Acute Stroke Patients', *Clinical EEG and Neuroscience*, 51(2), pp. 121–129. doi: 10.1177/1550059419875916.

Drozdowska, B. A. *et al.* (2021) 'Prognostic rules for predicting cognitive syndromes following stroke: A systematic review', *European Stroke Journal*, 6(1), pp. 18–27. doi: 10.1177/2396987321997045.

Dubovik, S. *et al.* (2012) 'The behavioral significance of coherent resting-state oscillations after stroke', *NeuroImage*, 61(1), pp. 249–257. doi: 10.1016/j.neuroimage.2012.03.024.

Dubovik, S. *et al.* (2013) 'EEG alpha band synchrony predicts cognitive and motor performance in patients with ischemic stroke', *Behavioural Neurology*, 26(3), pp. 187–189. doi: 10.3233/BEN-2012-129007.

E. Cuspidada, C. Machado, L. Galan, E. A. (2007) 'QEEG Prognostic Value', *Clinical EEG and Neuroscience*, 38(3).

Fanciullacci, C. *et al.* (2017) 'Delta power is higher and more symmetrical in ischemic stroke patients with cortical involvement', *Frontiers in Human Neuroscience*, 11(July), pp. 1–10. doi: 10.3389/fnhum.2017.00385.

Farokhi-Sisakht, F. *et al.* (2019) 'Cognitive Rehabilitation Improves Ischemic Stroke-Induced Cognitive Impairment: Role of Growth Factors', *Journal of Stroke and Cerebrovascular Diseases*, 28(10), p. 104299. doi: 10.1016/j.jstrokecerebrovasdis.2019.07.015.

Finnigan, S. P. *et al.* (2007) 'Quantitative EEG indices of sub-acute ischaemic stroke correlate with clinical outcomes', *Clinical Neurophysiology*, 118(11), pp. 2525–2532. doi: 10.1016/j.clinph.2007.07.021.

Finnigan, S. and van Putten, M. J. A. M. (2013) 'EEG in ischaemic stroke: Quantitative EEG can uniquely inform (sub-)acute prognoses and clinical management', *Clinical Neurophysiology*, 124(1), pp. 10–19. doi: 10.1016/j.clinph.2012.07.003.

- Finnigan, S. and Robertson, I. H. (2011) 'Resting EEG theta power correlates with cognitive performance in healthy older adults', *Psychophysiology*, 48(8), pp. 1083–1087. doi: 10.1111/j.1469-8986.2010.01173.x.
- Finnigan, S., Wong, A. and Read, S. (2016) 'Defining abnormal slow EEG activity in acute ischaemic stroke: Delta/alpha ratio as an optimal QEEG index', *Clinical Neurophysiology*, 127(2), pp. 1452–1459. doi: 10.1016/j.clinph.2015.07.014.
- Fleck, J. I. *et al.* (2016) 'Frontal-posterior coherence and cognitive function in older adults', *International Journal of Psychophysiology*, 110, pp. 217–230. doi: 10.1016/j.ijpsycho.2016.07.501.
- Gareau, M. G. (2016) *Cognitive Function and the Microbiome*. 1st edn, *International Review of Neurobiology*. 1st edn. Elsevier Inc. doi: 10.1016/bs.irn.2016.08.001.
- Gorantla, V. R. *et al.* (2020) 'Associations of Alpha and Beta Interhemispheric EEG Coherences with Indices of Attentional Control and Academic Performance', *Behavioural Neurology*, 2020. doi: 10.1155/2020/4672340.
- Gorelick, P. B., Counts, S. E. and Nyenhuis, D. (2016) 'Vascular cognitive impairment and dementia', *Biochimica et Biophysica Acta - Molecular Basis of Disease*, 1862(5), pp. 860–868. doi: 10.1016/j.bbadis.2015.12.015.
- Gudmundsson, S. *et al.* (2007) 'Reliability of quantitative EEG features', *Clinical Neurophysiology*, 118(10), pp. 2162–2171. doi: 10.1016/j.clinph.2007.06.018.
- Guggisberg, A. G. *et al.* (2015) 'Two Intrinsic Coupling Types for Resting-State Integration in the Human Brain', *Brain Topography*, 28(2), pp. 318–329. doi: 10.1007/s10548-014-0394-2.
- De Haan, E. H., Nys, G. M. and Van Zandvoort, M. J. (2006) 'Cognitive function following stroke and vascular cognitive impairment', *Current Opinion in Neurology*, 19(6), pp. 559–564. doi: 10.1097/01.wco.0000247612.21235.d9.
- Hospital, P. A. *et al.* (2016) 'Cognitive neurology and dementia', *Alzheimer's and Dementia*, 7(3), pp. 1–333. Available at: <http://dx.doi.org/10.1016/j.jalz.2011.03.003>[http://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780198525691.001.0001/acprof-9780198525691%0Aht](http://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780199372935.001.0001/acprof-9780199372935%0Ahttp://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780198525691.001.0001/acprof-9780198525691%0Aht).
- Husein, N. *et al.* (2010) 'Uji validitas dan reliabilitas Montreal Cognitive Assesment versi Indonesia (MoCA-IIna) untuk skrining gangguan fungsi kognitif', *Neurona*, 27(4), pp. 15–22. Available at: <http://www.neurona.web.id/paper-detail.do?id=734>.
- Jokinen, H. *et al.* (2015) 'Post-stroke cognitive impairment is common even after successful clinical recovery', *European Journal of Neurology*, 22(9), pp. 1288–1294. doi: 10.1111/ene.12743.
- Kalaria, R. N., Akinyemi, R. and Ihara, M. (2016) 'Stroke injury, cognitive impairment and vascular dementia', *Biochimica et Biophysica Acta - Molecular Basis of Disease*, 1862(5), pp. 915–925. doi: 10.1016/j.bbadis.2016.01.015.
- Kawano, T. *et al.* (2017) 'Large-Scale Phase Synchrony Reflects Clinical Status after Stroke: An EEG Study', *Neurorehabilitation and Neural Repair*, 31(6), pp. 561–570. doi: 10.1177/1545968317697031.

- Kemenkes RI (2018) 'Stroke Dont Be The One', p. 10.
- Kim, J. O., Lee, S. J. and Pyo, J. S. (2020) 'Effect of acetylcholinesterase inhibitors on post-stroke cognitive impairment and vascular dementia: A meta-analysis', *PLoS ONE*, 15(2), pp. 1–10. doi: 10.1371/journal.pone.0227820.
- Klimesch, W. (2012) 'Alpha-band oscillations, attention, and controlled access to stored information', *Trends in Cognitive Sciences*, 16(12), pp. 606–617. doi: 10.1016/j.tics.2012.10.007.
- Laptinskaya, D. *et al.* (2020) 'Global EEG coherence as a marker for cognition in older adults at risk for dementia', *Psychophysiology*, 57(4), pp. 1–13. doi: 10.1111/psyp.13515.
- Lee, G. E. *et al.* (2017) 'Deqi induction by HT7 acupuncture alters theta and alpha band coherence in human healthy subjects', *Evidence-based Complementary and Alternative Medicine*, 2017. doi: 10.1155/2017/7107136.
- Lejko, N. *et al.* (2020) 'Alpha Power and Functional Connectivity in Cognitive Decline: A Systematic Review and Meta-Analysis', *Journal of Alzheimer's Disease*, 78(3), pp. 1047–1088. doi: 10.3233/JAD-200962.
- Leon-Carrion, J. *et al.* (2009) 'Delta-alpha ratio correlates with level of recovery after neurorehabilitation in patients with acquired brain injury', *Clinical Neurophysiology*, 120(6), pp. 1039–1045. doi: 10.1016/j.clinph.2009.01.021.
- Levine, D. A. *et al.* (2018) 'Risk factors for poststroke cognitive decline: The REGARDS study (reasons for geographic and racial differences in stroke)', *Stroke*, 49(4), pp. 987–994. doi: 10.1161/STROKEAHA.117.018529.
- Li, J. *et al.* (2020) 'Association Between Early Cognitive Impairment and Midterm Functional Outcomes Among Chinese Acute Ischemic Stroke Patients: A Longitudinal Study', *Frontiers in Neurology*, 11(February), pp. 1–11. doi: 10.3389/fneur.2020.00020.
- Liao, X. *et al.* (2021) 'Screening for cognitive impairment with the montreal cognitive assessment at six months after stroke and transient ischemic attack', *Neurological Research*, 43(1), pp. 15–21. doi: 10.1080/01616412.2020.1819070.
- Lipnicki, D. M. *et al.* (2019) 'Determinants of cognitive performance and decline in 20 diverse ethno-regional groups: A COSMIC collaboration cohort study', *PLoS Medicine*, 16(7), pp. 1–27. doi: 10.1371/journal.pmed.1002853.
- Lv, Y. *et al.* (2020) 'Spectrum-specific encephalography standardized low-resolution brain electromagnetic tomography network and gray matter correlations in vascular dementia patients', *International Journal of Distributed Sensor Networks*, 16(1). doi: 10.1177/1550147719895960.
- Malek, N. *et al.* (2017) 'Electroencephalographic markers in dementia', *Acta Neurologica Scandinavica*, 135(4), pp. 388–393. doi: 10.1111/ane.12638.
- Mayza, A. and Lastri, D. N. (2017) 'Neurobehavior Dasar dan Pemeriksaannya', in *Buku Ajar Neurologi*. Jakarta: Departemen Neurologi Fakultas Kedokteran Indonesia, p. 149.
- Meeuwissen, E. B. *et al.* (2011) 'Increase in posterior alpha activity during rehearsal

predicts successful long-term memory formation of word sequences', *Human Brain Mapping*, 32(12), pp. 2045–2053. doi: 10.1002/hbm.21167.

Meghdadi, A. H. *et al.* (2021) *Resting state EEG biomarkers of cognitive decline associated with Alzheimer's disease and mild cognitive impairment*, *PLoS ONE*. doi: 10.1371/journal.pone.0244180.

Mokhber, N. *et al.* (2021) 'Cerebral blood flow changes during aging process and in cognitive disorders: A review', *Neuroradiology Journal*, 34(4), pp. 300–307. doi: 10.1177/19714009211002778.

Mole, J. A. and Demeyere, N. (2020) 'The relationship between early post-stroke cognition and longer term activities and participation: A systematic review', *Neuropsychological Rehabilitation*, 30(2), pp. 346–370. doi: 10.1080/09602011.2018.1464934.

Murias, M. *et al.* (2007) 'Resting State Cortical Connectivity Reflected in EEG Coherence in Individuals With Autism', *Biological Psychiatry*, 62(3), pp. 270–273. doi: 10.1016/j.biopsych.2006.11.012.

Ogoh, S. (2017) 'Relationship between cognitive function and regulation of cerebral blood flow', *Journal of Physiological Sciences*, 67(3), pp. 345–351. doi: 10.1007/s12576-017-0525-0.

Panentu, D. and Irfan, M. (2013) 'Uji Validitas Dan Reliabilitas Butir Pemeriksaan Dengan Moteral Cognitive Assessment Versi Indonesia (MoCA- INA) Pada Insan Pasca Stroke Fase Recovery', *Jurnal Fisioterapi*, 13(April), pp. 55–67.

Perdossi (2015) 'Panduan Praktik Klinik Diagnosis dan Penatalaksanaan Demensia'.

Petrovic, J. *et al.* (2017) 'Slower EEG alpha generation, synchronization and "flow"-possible biomarkers of cognitive impairment and neuropathology of minor stroke', *PeerJ*, 2017(9), pp. 1–26. doi: 10.7717/peerj.3839.

Rabiller, G. *et al.* (2015) 'Perturbation of brain oscillations after ischemic stroke: A potential biomarker for post-stroke function and therapy', *International Journal of Molecular Sciences*, 16(10), pp. 25605–25640. doi: 10.3390/ijms161025605.

Randolph, S. A. (2016) 'Ischemic Stroke', *Workplace Health and Safety*, 64(9), p. 444. doi: 10.1177/2165079916665400.

Rasyid, A. *et al.* (2017) 'Stroke Iskemik', in *Buku Ajar Neurologi*. Jakarta: Penerbit Kedokteran Indonesia, pp. 452–472.

Renton, T., Tibbles, A. and Topolovec-Vranic, J. (2017) 'Neurofeedback as a form of cognitive rehabilitation therapy following stroke: A systematic review', *PLoS ONE*, 12(5), pp. 1–17. doi: 10.1371/journal.pone.0177290.

Roca-Stappung, M. *et al.* (2012) 'Healthy aging: Relationship between quantitative electroencephalogram and cognition', *Neuroscience Letters*, 510(2), pp. 115–120. doi: 10.1016/j.neulet.2012.01.015.

Sacco, R. L. *et al.* (2013) 'An updated definition of stroke for the 21st century: A statement for healthcare professionals from the American heart association/American stroke association', *Stroke*, 44(7), pp. 2064–2089. doi: 10.1161/STR.0b013e318296aeca.

- Sauseng, P. and Klimesch, W. (2008) 'What does phase information of oscillatory brain activity tell us about cognitive processes?', *Neuroscience and Biobehavioral Reviews*, 32(5), pp. 1001–1013. doi: 10.1016/j.neubiorev.2008.03.014.
- Schleiger, E. *et al.* (2014) 'Frontal EEG delta/alpha ratio and screening for post-stroke cognitive deficits: The power of four electrodes', *International Journal of Psychophysiology*, 94(1), pp. 19–24. doi: 10.1016/j.ijpsycho.2014.06.012.
- Schwabedal, J. T. C. *et al.* (2016) 'Alpha-wave frequency characteristics in health and insomnia during sleep', *Journal of Sleep Research*, 25(3), pp. 278–286. doi: 10.1111/jsr.12372.
- Shekar, L., Suryavanshi, C. and Nayak, K. (2018) 'Effect of alpha and gamma binaural beats on reaction time and short-term memory', *National Journal of Physiology, Pharmacy and Pharmacology*, 8(6), p. 1. doi: 10.5455/njppp.2018.8.1246506022018.
- Sheorajpanday, R. V. A. *et al.* (2010) 'Additional value of quantitative EEG in acute anterior circulation syndrome of presumed ischemic origin', *Clinical Neurophysiology*, 121(10), pp. 1719–1725. doi: 10.1016/j.clinph.2009.10.037.
- Sheorajpanday, R. V. A. *et al.* (2011) 'Quantitative EEG in ischemic stroke: Correlation with functional status after 6 months', *Clinical Neurophysiology*, 122(5), pp. 874–883. doi: 10.1016/j.clinph.2010.07.028.
- Siegel, J. S. *et al.* (2016) 'The effects of hemodynamic lag on functional connectivity and behavior after stroke', *Journal of Cerebral Blood Flow and Metabolism*, 36(12), pp. 2162–2176. doi: 10.1177/0271678X15614846.
- Song, Y. *et al.* (2015) 'Background rhythm frequency and theta power of quantitative EEG analysis: Predictive biomarkers for cognitive impairment post-cerebral infarcts', *Clinical EEG and Neuroscience*, 46(2), pp. 142–146. doi: 10.1177/1550059413517492.
- Sun, J. H., Tan, L. and Yu, J. T. (2014) 'Post-stroke cognitive impairment: Epidemiology, mechanisms and management', *Annals of Translational Medicine*, 2(8). doi: 10.3978/j.issn.2305-5839.2014.08.05.
- Vijayan, M. and Reddy, P. H. (2016) 'Stroke, Vascular Dementia, and Alzheimer's Disease: Molecular Links', *Journal of Alzheimer's Disease*, 54(2), pp. 427–443. doi: 10.3233/JAD-160527.
- Wang, W. *et al.* (2021) 'The montreal cognitive assessment and mini-mental state examination visuoexecutive subtests in acute ischemic stroke patients and their correlations with demographic and clinical factors', *Acta Neurologica Belgica*, pp. 1707–1714. doi: 10.1007/s13760-020-01479-z.
- Wang, Y. *et al.* (2013) 'Associations between EEG Beta Power Abnormality and Diagnosis in Cognitive Impairment Post Cerebral Infarcts', *Journal of Molecular Neuroscience*, 49(3), pp. 632–638. doi: 10.1007/s12031-012-9918-y.
- Wolters, F. J. *et al.* (2017) 'Cerebral perfusion and the risk of dementia: A population-based study', *Circulation*, 136(8), pp. 719–728. doi: 10.1161/CIRCULATIONAHA.117.027448.
- Yang, Y. M. *et al.* (2020) 'Trends in cognitive function assessed by a battery of neuropsychological tests after mild acute ischemic stroke', *Journal of Stroke and*

Cerebrovascular Diseases, 29(7), pp. 1–7. doi:
10.1016/j.jstrokecerebrovasdis.2020.104887.

Yu, H. *et al.* (2017) 'Functional brain networks in healthy subjects under acupuncture stimulation: An EEG study based on nonlinear synchronization likelihood analysis', *Physica A: Statistical Mechanics and its Applications*, 468, pp. 566–577. doi:
10.1016/j.physa.2016.10.068.

Lampiran 1. Surat Rekomendasi Etik





REKOMENDASI PERSETUJUAN ETIK

Nomor : 821/UN4.6.4.5.31/PP36/2021

Tanggal: 27 Desember 2021

Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan Dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

No Protokol	UH21110724	No Sponsor Protokol	
Peneliti Utama	dr. Wa Ode Syakinah	Sponsor	
Judul Peneliti	PERBANDINGAN DELTA ALFA RASIO (DAR) DAN KOHERENSI INTERHEMISFERIK ALFA BETA DALAM PENENTUAN GANGGUAN FUNGSI KOGNITIF PADA PASIEN STROKE ISKEMIK		
No Versi Protokol	2	Tanggal Versi	20 Desember 2021
No Versi PSP	2	Tanggal Versi	20 Desember 2021
Tempat Penelitian	RS Dr. Wahidin Sudirohusodo dan RS Jejaring di Makassar		
Jenis Review	<input type="checkbox"/> Exempted <input checked="" type="checkbox"/> Expedited <input type="checkbox"/> Fullboard Tanggal	Masa Berlaku 27 Desember 2021 sampai 27 Desember 2022	Frekuensi review lanjutan
Ketua KEPK FKUH RSUH dan RSWS	Nama Prof.Dr.dr. Suryani As'ad, M.Sc.,Sp.GK (K)	Tanda tangan 	
Sekretaris KEPK FKUH RSUH dan RSWS	Nama dr. Agussalim Bukhari, M.Med.,Ph.D.,Sp.GK (K)	Tanda tangan 	

Kewajiban Peneliti Utama:

- Menyerahkan Amandemen Protokol untuk persetujuan sebelum di implementasikan
- Menyerahkan Laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan Laporan SUSAR dalam 72 Jam setelah Peneliti Utama menerima laporan
- Menyerahkan Laporan Kemajuan (progress report) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah
- Menyerahkan laporan akhir setelah Penelitian berakhir
- Melaporkan penyimpangan dari protokol yang disetujui (protocol deviation / violation)
- Mematuhi semua peraturan yang ditentukan

Lampiran 2. Naskah Penjelasan Pada Subjek



KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
UNIVERSITAS HASANUDDIN FAKULTAS KEDOKTERAN
KOMITE ETIK PENELITIAN KESEHATAN
RSPTN UNIVERSITAS HASANUDDIN
RSUP Dr. WAHIDIN SUDIROHUSODO MAKASSAR



**Sekretariat : Lantai 2 Gedung Laboratorium Terpadu
JL.PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10 MAKASSAR
90245.**

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0411 5780103, Fax : 0411-581431

NASKAH PENJELASAN

Assalamu'alaikum Warahmatullahi Wabarakatuh

Selamat pagi Bapak / Ibu /Saudara(i),

Perkenalkan saya dr. Wa Ode Syakinah, dari Departemen Neurologi Fakultas Kedokteran Unhas, berencana untuk melakukan penelitian untuk mengetahui Perbandingan Delta Alfa Ratio (DAR) Frontal serta Koherensi Interhemisferik Alfa Beta antara Pasien Stroke Iskemik Dengan Gangguan Kognitif dan Tanpa Gangguan Kognitif. Saya berencana akan melakukan penelitian untuk mengetahui perbedaan gambaran aktivitas listrik di otak dalam menilai adanya gangguan fungsi kognitif setelah stroke yang dialami Bapak/Ibu, kami lakukan dengan cara merekam aktivitas otak menggunakan alat *electroencephalography* (EEG). Alat EEG bertujuan menilai aktivitas listrik otak dalam mendeteksi gangguan fungsi kognitif setelah serangan stroke iskemik. Hasil penelitian ini diharapkan dapat menjadi pengetahuan baru untuk menentukan tindakan dan terapi selanjutnya yang akan meningkatkan kualitas hidup pasien yang lebih baik pada penderita stroke iskemik.

Terlebih dahulu, Kami akan mencatat identitas Bapak/Ibu (nama, alamat, umur, jenis kelamin, pekerjaan, riwayat penyakit sebelumnya), lalu melakukan tanya jawab mengenai penyakit, kemudian melakukan pemeriksaan fisik, dan pemeriksaan pencitraan kepala untuk menentukan suatu iskemik stroke akut. Langkah selanjutnya kami akan melakukan skrining dengan *Montreal Cognitive Assessment* – versi Indonesia (MoCA-IIna) dan kemudian dilakukan perekaman EEG selama 3 menit pada onset stroke < 3 bulan.

Perekaman EEG akan dilakukan dengan menempelkan elektroda pada kulit kepala. Alat ini non-invasif dan tidak menimbulkan efek samping. Kriteria subyek penelitian kami adalah pasien laki-laki dan perempuan dengan: stroke iskemik dengan

onset < 3 bulan, usia 36-65 tahun, dan bersedia ikut serta dalam penelitian dengan menandatangani surat pernyataan persetujuan oleh pasien dan wali pasien. Kriteria eksklusi: pasien dengan penurunan tingkat kesadaran, pasien memiliki riwayat epilepsi, pasien depresi berat atau gangguan psikiatrik lainnya, pasien dengan kelainan struktural otak yang dapat menyebabkan gangguan kognitif seperti tumor otak, trauma kepala, abses cerebri. Kriteria pengunduran diri adalah pasien meninggal dunia pada periode penelitian dan pasien yang tidak mengikuti seluruh rangkaian penelitian. Semua kegiatan dalam penelitian ditanggung oleh peneliti.

Kami akan mencatat dan mengolah semua data yang sudah kami peroleh, hasil dari pengolahan data akan kami tampilkan di jurnal ilmiah tanpa membuka informasi data pribadi subyek penelitian. Kerahasiaan data dijamin dan hanya diketahui oleh peneliti dan komisi etik.

Keikutsertaan Bapak/Ibu dalam penelitian ini bersifat sukarela tanpa paksaan, karena itu bila Bapak/Ibu menolak ikut atau berhenti ikut pada penelitian ini tidak akan mengurangi atau kehilangan hak untuk mendapatkan pelayanan kesehatan standar rutin sesuai dengan penyakit yang Bapak/Ibu derita serta mendapat obat yang diperlukan.

Bila masih ada hal-hal yang ingin bapak/Ibu ketahui, atau masih ada hal-hal yang belum jelas, maka Bapak/Ibu bisa bertanya dan meminta penjelasan kami di Poliklinik Saraf Departemen Ilmu penyakit Saraf RSUP dr. Wahidin Sudirohusodo Makassar, atau secara langsung melalui No. HP peneliti : 08114091008.

Demikian penjelasan saya, jika Bapak/Ibu bersedia untuk berpartisipasi, diharapkan menandatangani surat persetujuan mengikuti penelitian. Atas kesediaan dan kerjasamanya diucapkan terima kasih.

Identitas peneliti :

Nama : dr. Wa Ode Syakinah

Alamat : BTN Minasaupa Blok A6 No. 14 A

Telepon : 08114091008

Lampiran 3. Formulir Persetujuan Mengikuti Penelitian



KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
UNIVERSITAS HASANUDDIN FAKULTAS KEDOKTERAN
KOMITE ETIK PENELITIAN KESEHATAN



RSPTN UNIVERSITAS HASANUDDIN
RSUP Dr. WAHIDIN SUDIROHUSODO MAKASSAR
Sekretariat : Lantai 2 Gedung Laboratorium Terpadu

**JL.PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10 MAKASSAR
90245.**

Contact Person: dr. Agussalim Bukhari.,MMed,PhD, SpGK TELP. 081241850858,
0411 5780103, Fax : 0411-581431

FORMULIR PERSETUJUAN SETELAH PENJELASAN

Saya yang bertandatangan di bawah ini :

Nama :
Umur :
Masa Kerja :
Satuan :
Alamat :

setelah mendengar/membaca dan mengerti penjelasan yang diberikan mengenai tujuan, manfaat, dan apa yang akan dilakukan pada penelitian ini, menyatakan setuju untuk ikut dalam penelitian ini secara sukarela tanpa paksaan.

Saya tahu bahwa keikutsertaan saya ini bersifat sukarela tanpa paksaan, sehingga saya bisa menolak ikut atau mengundurkan diri dari penelitian ini. Saya berhak bertanya atau meminta penjelasan pada peneliti bila masih ada hal yang belum jelas atau masih ada hal yang ingin saya ketahui tentang penelitian ini.

Saya juga mengerti bahwa semua biaya yang dikeluarkan sehubungan dengan penelitian ini, akan ditanggung oleh peneliti. Saya percaya bahwa keamanan dan kerahasiaan data penelitian akan terjamin dan saya dengan ini menyetujui semua data saya yang dihasilkan pada penelitian ini untuk disajikan dalam bentuk lisan maupun tulisan.

Dengan membubuhkan tandatangan saya di bawah ini, saya menegaskan keikutsertaan saya secara sukarela dalam studi penelitian ini.

	Nama	Tanda tangan	Tgl/Bln/Thn
Responden
/Wali			
Saksi

(Tanda Tangan Saksi diperlukan hanya jika Partisipan tidak dapat memberikan consent/persetujuan sehingga menggunakan wali yang sah secara hukum, yaitu untuk partisipan berikut:

1. Berusia di bawah 18 tahun

2. Usia lanjut
3. Gangguan mental
4. Pasien tidak sadar
5. Dan lain-lain kondisi yang tidak memungkinkan memberikan persetujuan

Penanggung jawab penelitian : Nama : dr. Wa Ode Syakinah Alamat : BTN Minasaupa Blok A6 No. 14 A, Makassar Tlp : 08114091008	Penanggung jawab Medis : Nama : Dr. dr. Jumraini Tammase, Sp.S (K) Alamat : Klinik Inggris Medika BTP Blok G No. 15-16, Makassar Telp : 082188833368
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Lampiran 4. Montreal Cognitive Assessment Versi Indonesia (MOCA-INA)

MONTREAL COGNITIVE ASSESSMENT ver. INDONESIA (MOCA-INA)

NAMA/JENIS KELAMIN:
TANGGAL LAHIR/USIA:

TANGGAL PEMERIKSAAN:

VISUOSPASIAL/FUNGSI EKSEKUTIF	Menyalin kubus	Menggambar Jam Dinding (Pukul sebelas lebih sepuluh menit)	NILAI																													
<p>[] []</p>	<p>[] []</p>	<p>[] [] []</p> <p>Bentuk Angka Jarum Jam</p>/5																													
PENAMAAN	[]	[]	[]	<p>...../3</p>																												
MEMORI	<table border="1"> <thead> <tr> <th></th> <th>WAJAH</th> <th>SUTERA</th> <th>MASJID</th> <th>ANGGREK</th> <th>MERAH</th> </tr> </thead> <tbody> <tr> <td>I</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>II</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Mengingat daftar kata. Subjek diminta untuk mengulang. Lakukan dua kali. Recall dilakukan setelah 5 menit.</p>				WAJAH	SUTERA	MASJID	ANGGREK	MERAH	I						II						TIDAK DINILAI										
	WAJAH	SUTERA	MASJID	ANGGREK	MERAH																											
I																																
II																																
ATENSI	<ul style="list-style-type: none"> Subjek menyebutkan kembali angka dengan urutan maju 2 - 1 - 8 - 5 - 4 [] Subjek menyebutkan kembali angka dengan urutan terbalik 2 - 4 - 7 [] 		/2																												
Mendengarkan deretan huruf. Subjek harus bertepuk tangan setiap mendengar huruf A. Tidak ada nilai jika kesalahan ≥ 2. [F B A C M N A A J K L B A F A D E A A A J A M O F A A B]		/1																													
Pengurangan angka 7, dimulai dengan angka 100 [] 93 [] 86 [] 79 [] 73 [] 65 Nilai 3: bila benar 4-5; Nilai 2: bila benar 2-3; Nilai 1: hanya 1 benar; Nilai 0: tidak ada yang benar.		/3																													
BAHASA	Mengulang kalimat berikut di bawah ini: 1. Wati membantu saya menyapu lantai hari ini [] 2. Tikus bersembunyi di bawah dipan ketika kucing datang []		/2																												
Kelancaran Berbahasa: "Sebutkan sebanyak-banyaknya kata yang dimulai dengan huruf "S" dalam waktu 1 menit" Normal >11 []		/1																													
ABSTRAKSI	CONTOH: Persamaan antara JERUK – PISANG = BUAH KERETA – SEPEDA [] JAM TANGAN – PENGGARIS []		/2																												
MEMORI TUNDA	<table border="1"> <thead> <tr> <th></th> <th>PETUNJUK</th> <th>WAJAH</th> <th>SUTERA</th> <th>MASJID</th> <th>ANGGREK</th> <th>MERAH</th> </tr> </thead> <tbody> <tr> <td>TANPA PETUNJUK</td> <td></td> <td>[]</td> <td>[]</td> <td>[]</td> <td>[]</td> <td>[]</td> </tr> <tr> <td>Kategori</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Pilihan Ganda</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Harus Mengingat kembali daftar kata TANPA PETUNJUK. Nilai hanya diberikan untuk kata yg dapat diingat tanpa petunjuk.</p>				PETUNJUK	WAJAH	SUTERA	MASJID	ANGGREK	MERAH	TANPA PETUNJUK		[]	[]	[]	[]	[]	Kategori							Pilihan Ganda						/5
	PETUNJUK	WAJAH	SUTERA	MASJID	ANGGREK	MERAH																										
TANPA PETUNJUK		[]	[]	[]	[]	[]																										
Kategori																																
Pilihan Ganda																																
ORIENTASI	TGL [] BLN [] THN [] HARI [] TEMPAT [] KOTA []		/6																												
Normal ≥ 26			TOTAL Tambahkan 1 nilai jika Pendidikan < 12thn/30																													

Lampiran 5. Data Mentah

Nilai DAR Pada Kelompok Gangguan kognitif

Subyek	Jenis Kelamin	Usia (Tahun)	Onset (hari)	Lesi	FP1	F3	F7	FP2	F4	F8	Fz
					DAR	DAR	DAR	DAR	DAR	DAR	DAR
S01	P	59	16	hemisphere cerebri sinistra	1.74	0.34	0.51	2.36	0.39	0.67	0.35
S03	L	60	15	hemisphere cerebri dextra	11.68	5.12	8.84	15.82	10	10.43	8.34
S04	L	40	25	hemisphere cerebri dextra	8.89	5.75	9.19	8.54	6.23	7.94	5.85
S06	L	40	78	hemisphere cerebri dextra	10.98	8.22	6.47	7.79	2.82	2.61	5.12
S07	L	48	15	hemisphere cerebri dextra	3.3	2.35	3.85	2.4	1.31	1.95	1.73
S08	P	55	21	hemisphere cerebri sinistra	3	1.71	5.21	2.96	2.24	3.97	1.96
S10	L	48	22	Hemisphere cerebri dextra	11.51	11.65	11.25	11.19	11.22	11.28	9.51
S12	L	60	87	Hemisphere cerebri sinistra	18.95	20.69	22.04	20.69	16.51	17.72	20.23
S13	P	48	15	Hemisphere cerebri dextra	10.56	10.99	11.51	9.91	10.8	9.23	9.84
S15	P	56	17	Hemisphere cerebri sinistra	2.91	1.4	2.08	2.63	1.21	2	1.43
S17	P	49	56	hemisphere cerebri sinistra	1.71	0.49	0.56	2.99	1.57	2.24	1.1
S19	L	51	15	hemisphere cerebri sinistra	11.44	5.85	7.6	5.53	3.9	8.24	4.97
S21	P	63	29	hemisphere cerebri sinistra	4.37	3.42	5.48	5.15	2.49	3.11	2.57
S22	L	55	20	hemisphere cerebri sinistra	6.07	5.54	2.68	4.88	3.38	2.56	4.97
S25	P	59	15	hemisphere cerebri sinistra	1.8	1.72	5.62	2.43	2.31	2.58	1.36

Nilai DAR Pada Kelompok Tanpa Gangguan Kognitif

Subyek	Jenis Kelamin	Usia (Tahun)	Onset (hari)	Lesi	FP1	F3	F7	FP2	F4	F8	Fz
					DAR	DAR	DAR	DAR	DAR	DAR	DAR
S02	L	41	56	hemisphere cerebri dextra	4.28	2.63	2.85	6.23	4.39	3.66	2.78
S05	L	51	15	hemisphere cerebri dextra	2.73	1.37	1.48	2.6	1.26	1.88	1.08
S09	L	52	15	hemisphere cerebri dextra	6.24	1.9	3.76	6	2.43	5.1	1.74
S11	L	65	32	Hemisphere cerebri dextra	4.61	3.41	5.67	4.91	2.83	5.87	1.84
S14	L	62	34	Hemisphere cerebri sinistra	3.63	1.98	2.64	3.03	1.56	2.35	1.49
S16	L	51	17	hemisphere cerebri dextra	0.96	0.4	1.02	0.81	0.43	0.84	0.35
S18	L	64	15	hemisphere cerebri dextra	1.48	0.61	1.07	1.07	0.52	0.74	0.5
S20	L	42	21	hemisphere cerebri dextra	1.83	1.4	3.33	3.83	2.6	8.2	1.79
S23	P	44	32	hemisphere cerebri dextra	1.58	1.39	1.44	1.63	1.62	1.5	1.68
S24	L	53	15	hemisphere cerebri sinistra	1.38	1.47	2.76	1.26	0.86	1.99	1.11
S26	L	41	16	hemisphere cerebri dextra	0.78	0.35	0.86	0.92	0.37	2.01	0.31
S27	L	54	15	hemisphere cerebri dextra	1.76	1.17	1.06	1.72	1.31	2.41	1.27
S28	L	55	30	hemisphere cerebri dextra	0.71	0.49	1.16	1.02	0.97	1.42	0.55
S29	L	46	17	hemisphere cerebri dextra	0.59	0.32	0.68	0.52	0.24	0.48	0.2
S30	L	52	24	hemisphere cerebri dextra	0.43	0.48	0.59	0.41	0.24	0.42	0.35

Nilai Koherensi Alfa Pada Kelompok Gangguan Kognitif

No.	Subyek	Jenis Kelamin	Usia (Tahun)	FP1-FP2	C3-C4	O1-O2	T3-T4	F3-F4	P3-P4	F7-F8	T5-T6
1	S01	P	59	95.5	87.09	41.13	32.47	90.58	74.3	65.09	14.3
2	S03	L	60	62.24	23.87	29.43	9.6	33.92	42.29	2.84	0.27
3	S04	L	40	63.61	26.1	10.49	0.11	42.15	41.33	2.61	1.52
4	S06	L	40	52.97	38.89	26.5	13.02	21.13	53.89	3.55	8.63
5	S07	L	48	44.98	32.08	22.4	1.16	25.64	49.44	2.3	2.15
6	S08	P	55	72.54	27.37	0.36	9.68	48.84	46.69	1.87	13.96
7	S10	L	48	90.26	39.1	35.35	10.54	57.69	46.23	19.12	19.02
8	S12	L	60	67.05	38.69	51.24	18.46	54.41	41.23	34.66	21.96
9	S13	P	48	75.1	51.55	55.13	2.52	67.6	61.35	32.73	27.6
10	S15	P	56	81.9	83.17	58.11	23.92	85.01	82.36	48.29	38.19
11	S17	P	49	49.94	1.5	7.84	19.32	0.15	2.82	34.06	36.98
12	S19	L	51	48.54	4.26	8.96	15.25	25.22	4.89	36.91	12.04
13	S21	P	63	60.29	0.8	1.42	37.76	26.91	2.28	69.62	20.92
14	S22	L	55	50.62	12.64	23.36	25.16	33.55	8.48	48.47	42.16
15	S25	P	59	52.17	21.2	2.76	33.78	17.15	21.66	65.07	14.45

Nilai Koherensi Alfa Pada Kelompok Tanpa Gangguan Kognitif

No.	Subyek	Jenis Kelamin	Usia (Tahun)	FP1-FP2	C3-C4	O1-O2	T3-T4	F3-F4	P3-P4	F7-F8	T5-T6
1	S02	L	41	60.55	26.75	18.82	15.49	23.57	31.11	0.77	12.56
2	S05	L	51	70.22	58.17	26.72	1.39	62.9	63.96	8.17	5.92
3	S09	L	52	24.45	30.31	35.6	8.91	24.55	28.14	3.5	7.75
4	S11	L	65	69.39	23.69	54.29	19.91	62.34	25.57	2.79	13.89
5	S14	L	62	64.18	0.28	13.12	7.05	25.11	3.98	0.29	0.96
6	S16	L	51	92.49	74.93	30.04	24.73	84.97	67.87	43.53	3.73
7	S18	L	64	84.23	36.6	28.2	1.99	73.6	47.32	25.47	0.36
8	S20	L	42	71	9.6	11.09	38.33	55.13	6.4	16.37	51.11
9	S23	P	44	50.02	4.12	19.24	34.23	19.16	4.23	45.97	39.95
10	S24	L	53	61.35	15.5	28.09	8.14	41.92	25.22	43.65	31.38
11	S26	L	41	94.44	31.89	48.12	12.41	88.35	34.84	15.55	6.46
12	S27	L	54	58.66	7.83	9.24	38.05	27.36	7.07	60.02	43.73
13	S28	L	55	84.93	10.18	29.4	41.05	62.83	16.84	53.57	24.57
14	S29	L	46	91.06	58.84	34.32	6.25	82.66	49.66	35.46	12.35
15	S30	L	52	89.2	65.16	28.78	34.86	73.62	70.45	47.34	5.29

Nilai Koherensi Beta Pada Kelompok Gangguan Kognitif

No.	Subyek	Jenis Kelamin	Usia (Tahun)	FP1-FP2	C3-C4	O1-O2	T3-T4	F3-F4	P3-P4	F7-F8	T5-T6
1	S01	P	59	64.63	51.75	25.41	0.24	50.86	43.33	4.53	1.93
2	S03	L	60	52.35	16.71	32.96	0.2	21.41	37.29	0.48	1.93
3	S04	L	40	38.54	25.65	22.28	0.36	28.43	44.02	2.66	0.01
4	S06	L	40	23.14	34.09	44.48	3.01	6.93	59.45	1.69	0.38
5	S07	L	48	13.13	21.4	16.77	1.37	13.87	42.57	0.64	2.5
6	S08	P	55	39.78	31.89	13.08	11	32.86	61.59	2.2	3.94
7	S10	L	48	90.51	62.16	56.42	30.21	60.44	72.65	39.02	28.98
8	S12	L	60	52.41	45.35	75.36	34.13	50.55	70.54	34.18	56.48
9	S13	P	48	64.41	60.73	53.37	13.95	67	70.87	49.78	27.47
10	S15	P	56	43.78	61.18	45	3.7	61.94	70.53	17.13	19.56
11	S17	P	49	68.93	0.86	10.01	4.29	10.19	6.24	5.16	7.31
12	S19	L	51	26.97	7.34	5.28	7.75	16.26	4.57	33.02	17.57
13	S21	P	63	24.05	4.64	8.45	15.21	9.6	5.94	31.71	11.06
14	S22	L	55	28.14	2.94	14.12	6.27	11.37	9.09	53.09	33.73
15	S25	P	59	26.63	5.08	2.83	11.95	5.51	9.87	35.53	12.72

Nilai Koherensi Beta Pada Kelompok Tanpa Gangguan Kognitif

No.	Subyek	Jenis Kelamin	Usia (Tahun)	FP1-FP2	C3-C4	O1-O2	T3-T4	F3-F4	P3-P4	F7-F8	T5-T6
1	S02	L	41	46.74	27.32	29.23	5.71	14.75	37.63	0.51	3.96
2	S05	L	51	32.18	21.93	28.45	2.09	30.11	41.97	2.05	3.74
3	S09	L	52	21.2	24.88	39.77	0.05	14.22	27.44	2.1	0.77
4	S11	L	65	22	0.7	20.85	0.61	1.71	7.19	0.59	0.02
5	S14	L	62	74.64	12.37	45.01	12.98	46.74	28.67	30.1	22.4
6	S16	L	51	68.59	49.81	36.43	0.91	51.25	58.55	4.15	0.1
7	S18	L	64	50.34	19.37	32.24	0.42	37.3	42.98	1.44	2.63
8	S20	L	42	26.39	2.17	23.97	27.84	8.57	3.2	46.72	30.8
9	S23	P	44	42.7	1.17	38.45	19.57	17.68	16.61	49.45	34.28
10	S24	L	53	13.41	7.49	13.73	7.44	21.22	11.57	40.44	29.55
11	S26	L	41	46.47	14.08	8.94	5.24	34.61	7.02	30.53	4.33
12	S27	L	54	41.14	1.47	20.97	28.85	10.02	0.01	54.86	32.91
13	S28	L	55	56.72	7	3.8	29.69	23.61	6.77	57.67	38.34
14	S29	L	46	59.67	15.99	26.36	6.89	33.82	39.52	0.31	9.62
15	S30	L	52	47.26	33.59	26.1	3.4	37.95	48.37	9.99	1.57

Lampiran 6. Analisa Data

1. Uji Normalitas dan Uji Statistik Rasio Delta-Alfa (DAR)

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
FP1.DAR	.210	30	.002	.812	30	.000
F3.DAR	.243	30	.000	.696	30	.000
F7.DAR	.198	30	.004	.774	30	.000
FP2.DAR	.207	30	.002	.789	30	.000
F4.DAR	.278	30	.000	.714	30	.000
F8.DAR	.252	30	.000	.796	30	.000
Fz.DAR	.284	30	.000	.671	30	.000

a. Lilliefors Significance Correction

Test Statistics^a

	FP1.DAR	F3.DAR	F7.DAR	FP2.DAR	F4.DAR	F8.DAR	Fz.DAR
Mann-Whitney U	35.000	40.000	45.000	40.000	46.500	54.000	38.000
Wilcoxon W	155.000	160.000	165.000	160.000	166.500	174.000	158.000
Z	-3.215	-3.008	-2.800	-3.007	-2.738	-2.426	-3.092
Asymp. Sig. (2-tailed)	.001	.003	.005	.003	.006	.015	.002
Exact Sig. [2*(1-tailed Sig.)]	.001 ^b	.002 ^b	.004 ^b	.002 ^b	.005 ^b	.015 ^b	.001 ^b

a. Grouping Variable: Kelompok

b. Not corrected for ties.

2. Uji Normalitas dan Uji Statistik Koherensi Interhemisferik Alfa

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
FP1.FP2.Alpha	.092	30	.200*	.958	30	.272
C3.C4.Alpha	.144	30	.115	.925	30	.035
O1.O2.Alpha	.110	30	.200*	.955	30	.232
T3.T4.Alpha	.129	30	.200*	.921	30	.029
F3.F4.Alpha	.157	30	.056	.939	30	.086
P3.P4.Alpha	.134	30	.180	.940	30	.094
F7.F8.Alpha	.167	30	.031	.905	30	.011
T5.T6.Alpha	.190	30	.007	.908	30	.013

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
FP1-FP2 Alfa	Equal variances assumed	.271	.607	-1.027	28	.313	-6.56400	6.39386	-19.66122	6.53322
	Equal variances not assumed			-1.027	26.985	.314	-6.56400	6.39386	-19.68346	6.55546

Test Statistics^a

C3-C4.Afa	
Mann-Whitney U	104.000
Wilcoxon W	224.000
Z	-.353
Asymp. Sig. (2-tailed)	.724
Exact Sig. [2*(1-tailed Sig.)]	.744 ^b

a. Grouping Variable: Kelompok

b. Not corrected for ties.

3. Uji Normalitas dan Uji Statistik Koherensi Interhemisferik Beta

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
FP1.FP2.Beta	.121	30	.200*	.968	30	.488
C3.C4.Beta	.142	30	.128	.888	30	.004
O1.O2.Beta	.090	30	.200*	.954	30	.211
T3.T4.Beta	.212	30	.001	.822	30	.000
F3.F4.Beta	.137	30	.155	.926	30	.039
P3.P4.Beta	.177	30	.017	.901	30	.009
F7.F8.Beta	.249	30	.000	.835	30	.000
T5.T6.Beta	.219	30	.001	.853	30	.001

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
FP1.FP2.Beta	Equal variances assumed	.747	.395	.074	28	.942	.53000	7.18829	-14.19454	15.25454
	Equal variances not assumed			.074	27.047	.942	.53000	7.18829	-14.21795	15.27795

Test Statistics^a

C3.C4.Beta	
Mann-Whitney U	75.000
Wilcoxon W	195.000
Z	-1.555
Asymp. Sig. (2-tailed)	.120
Exact Sig. [2*(1-tailed Sig.)]	.126 ^b

a. Grouping Variable: Kelompok

b. Not corrected for ties.

4. Uji Statistik Karakteristik Demografi Subjek Penelitian

JK * Kelompok Crosstabulation

		Kelompok			
			Gangguan kognitif	Tanpa gangguan kognitif	Total
JK	Laki-laki	Count	8	14	22
		% within Kelompok	53.3%	93.3%	73.3%
	Perempuan	Count	7	1	8
		% within Kelompok	46.7%	6.7%	26.7%
Total		Count	15	15	30
		% within Kelompok	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.136 ^a	1	.013		
Continuity Correction ^b	4.261	1	.039		
Likelihood Ratio	6.719	1	.010		
Fisher's Exact Test				.035	.018
Linear-by-Linear Association	5.932	1	.015		
N of Valid Cases	30				

- a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.00.
 b. Computed only for a 2x2 table

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Usia	Gangguan kognitif	15	52.7333	7.16606	1.85027
	Tanpa gangguan kognitif	15	51.5333	7.87280	2.03275

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Usia	Equal variances assumed	.001	.973	.437	28	.666	1.20000	2.74874	-4.43053	6.83053
	Equal variances not assumed			.437	27.756	.666	1.20000	2.74874	-4.43276	6.83276