REFERENSI

Abadin, A. F. M. Z., Imtiaz, A., Ahmed, M. M., & Dutta, M. (2021). A Brief Study of Binaural Beat: A Means of Brain-Computer Interfacing. In *Advances in Human-Computer Interaction* (Vol. 2021). Hindawi Limited. https://doi.org/10.1155/2021/6814208

Abhang, P. A., Gawali, B. W., & Mehrotra, S. C. (2016). Technological Basics of EEG Recording and Operation of Apparatus. *Introduction to EEG- and Speech-Based Emotion Recognition*, 19–50. https://doi.org/10.1016/B978-0-12-804490-2.00002-6

Alim, A., & Imtiaz, M. H. (2023). Automatic Identification of Children with ADHD from EEG Brain Waves. *Signals 2023, Vol. 4, Pages 193-205*, *4*(1), 193–205. https://doi.org/10.3390/SIGNALS4010010

Al-Kaf, H., Khandoker, A., Khalaf, K., & Jelinek, H. F. (2020). NeuroSky Mindwave Mobile Headset 2 as an Intervention for Reduction of Stress and Anxiety Measured with Pulse Rate Variability. *Computing in Cardiology*, *2020-September*. https://doi.org/10.22489/CinC.2020.350

Almagor, D., Duncan, D., & Gignac, M. (Eds.). (2020). *Canadian ADHD Practice Guidelines* (4.1 Edition). Canadian ADHD Resource Alliance. www.caddra.ca

Antshel, K. M., & Barkley, R. (2020). Attention deficit hyperactivity disorder. *Handbook of Clinical Neurology*, *174*, 37–45. https://doi.org/10.1016/B978-0-444-64148-9.00003-X

Anwar, D. S., Mohd Yusof, M. Y. P., Ahmad, M. S., & Md Sabri, B. A. (2022). Family Influences on the Dental Caries Status of Children with Special Health Care Needs: A Systematic Review. In *Children* (Vol. 9, Issue 12). Multidisciplinary Digital Publishing Institute (MDPI). https://doi.org/10.3390/children9121855

Aparecido-Kanzler, S., Cidral-Filho, F. J., & Prediger, R. D. (2021). Effects of binaural beats and isochronic tones on brain wave modulation: Literature review. *Revista Mexicana de Neurociencia*, *22*(6). https://doi.org/10.24875/rmn.20000100

Appukuttan, D. P. (2016). Strategies to manage patients with dental anxiety and dental phobia: Literature review. *Clinical, Cosmetic and Investigational Dentistry*, *8*, 35–50. https://doi.org/10.2147/CCIDE.S63626

Begnini, G. J., Brancher, J. A., Guimarães, A. T. B., de Araujo, M. R., & Pizzatto, E. (2019). Oral Health of Children and Adolescents with Attention Deficit Hyperactivity Disorder. *International Journal of Clinical Pediatric Dentistry*, *12*(6), 543–547. https://doi.org/10.5005/jp-journals-10005-1691

Behavior Guidance for the Pediatric Dental Patient. (2023). *American Academy of Pediatric Dentistry*.

Bhusari, B. N., Hugar, S. M., Kohli, N., Karmarkar, S., Gokhale, N., & Saxena, N. (2023). Comparative evaluation of anxiety level during restorative treatment using no music, monaural beats, and binaural auditory beats as audio distraction behavior guidance technique in children aged 6-12 years: A randomized clinical trial. *Journal of Indian Society of Pedodontics and Preventive Dentistry*, *41*(2), 156–162. https://doi.org/10.4103/jisppd.jisppd_104_23

Carlsson, V., Hakeberg, M., Blomkvist, K., & Wide Boman, U. (2013). Attention deficit hyperactivity disorder and dental anxiety in adults: Relationship with oral health. *European Journal of Oral Sciences*, *121*(3 PART2), 258–263. https://doi.org/10.1111/eos.12016

Caye, A., Swanson, J. M., Coghill, D., & Rohde, L. A. (2019). Treatment strategies for ADHD: an evidence-based guide to select optimal treatment. *Molecular Psychiatry*, *24*(3), 390–408. https://doi.org/10.1038/s41380-018-0116-3

Cianetti, S., Lombardo, G., Lupatelli, E., Pagano, S., Abraha, I., Montedori, A., Caruso, S., Gatto, R., De Giorgio, S., Salvato, R., & Paglia, L. (2017). Dental fear/anxiety among children and adolescents. A systematic review. *European Journal of Paediatric Dentistry*, *18*(2), 121–130.

Coghill, D., & Danckaerts, M. (2018). *Organizing and Delivering Treatment for ADHD* (1st Edition). Oxford University Press.

Dalsgaard, S., Leckman, J. F., Mortensen, P. B., Nielsen, H. S., & Simonsen, M. (2015). Effect of drugs on the risk of injuries in children with attention deficit hyperactivity disorder: A prospective cohort study. *The Lancet Psychiatry*, *2*(8), 702–709. https://doi.org/10.1016/S2215-0366(15)00271-0

de Lorient, S. R., Setiawati, Y., Hidayati, H. B., & Rejeki, P. S. (2023). Relationship between Sociodemographic Factors and Caregiver Burden Among Mothers of Elementary School Students with ADHD Symptoms in Surabaya: A Cross-sectional Study. *International Journal Of Scientific Advances*, *4*(3). https://doi.org/10.51542/ijscia.v4i3.29

Dean, J. A., & Jones, J. E. (2019). *McDonald and Avery's Dentistry for the Child and Adolescent SECOND SOUTH ASIA EDITION* (2nd South Asia Ed.). Elsevier. https://t.me/RoyalDentistryLibrary

Del-Ponte, B., Anselmi, L., Assunção, M. C. F., Tovo-Rodrigues, L., Munhoz, T. N., Matijasevich, A., Rohde, L. A., & Santos, I. S. (2019). Sugar consumption and attention-deficit/hyperactivity disorder (ADHD): A birth cohort study. *Journal of Affective Disorders*, *243*, 290–296. https://doi.org/10.1016/j.jad.2018.09.051

Denis, F., Pelletier, J. F., Chauvet-Gelinier, J. C., Rude, N., & Trojak, B. (2018). Oral health is a challenging problem for patients with schizophrenia: A narrative review. *Iranian Journal of Psychiatry and Behavioral Sciences*, *12*(1). https://doi.org/10.5812/ijpbs.8062

Dini, H., Rahmanian, M., Alipour, A., & Arbabi, S. (2021). The Effectiveness of Brainwave Entrainment by Binaural Beats on the Sleep Quality. *J Sleep Sci*, *6*(4). http://jss.tums.ac.ir

Drechsler, R., Brem, S., Brandeis, D., Grünblatt, E., Berger, G., & Walitza, S. (2020). ADHD: Current concepts and treatments in children and adolescents. *Neuropediatrics*, *51*(5), 315–335. https://doi.org/10.1055/s-0040-1701658

Ecsy, K., Jones, A. K. P., & Brown, C. A. (2017). Alpha-range visual and auditory stimulation reduces the perception of pain. *European Journal of Pain (United Kingdom)*, *21*(3), 562–572. https://doi.org/10.1002/ejp.960

Faheem, M., Akram, W., Akram, H., Khan, M. A., Siddiqui, F. A., & Majeed, I. (2022). Gender-based differences in prevalence and effects of ADHD in adults: A systematic review. *Asian Journal of Psychiatry*, *75*. https://doi.org/10.1016/j.ajp.2022.103205

Fakhruddin, K. S., ElBatawi, H., & El-Damanhoury, H. M. (2018). Behavioral management using sequenced treatment paradigm and audiovisual distraction during dental treatment in children with attention deficit/hyperactivity disorder. *European Journal of Dentistry*, *12*(2), 262–268. https://doi.org/10.4103/ejd.ejd_59_18

Faraone, S. V., & Larsson, H. (2019). Genetics of attention deficit hyperactivity disorder. *Molecular Psychiatry*, *24*(4), 562–575. https://doi.org/10.1038/s41380-018-0070-0

Farhanaz, F., Yashoda, R., & Puranik, M. P. (2018). Oral Health Status and Parental Perception of Dental Anxiety of Attention Deficit Hyperactivity Disorder and Nonattention Deficit Hyperactivity Disorder Children in Bengaluru City: A Cross-Sectional Study. *Journal of Indian Association of Public Health Dentistry*, *16*(4), 291–296.

Fedele, D. A., Lefler, E. K., Hartung, C. M., & Canu, W. H. (2012). Sex Differences in the Manifestation of ADHD in Emerging Adults. *Journal of Attention Disorders*, *16*(2), 1557–1246.

Felemban, O. M., Alshamrani, R. M., Aljeddawi, D. H., & Bagher, S. M. (2021). Effect of virtual reality distraction on pain and anxiety during infiltration anesthesia in pediatric patients: a randomized clinical trial. *BMC Oral Health*, *21*(1). https://doi.org/10.1186/s12903-021-01678-x

Felt, B. T., Biermann, B., Christner, J. G., Kochhar, P., & Van Harrison, R. (2014). Diagnosis and Management of ADHD in Children. *American Family Physician*, *90*(7), 456–464. www.aafp.org/afp.

Fraticelli, S., Caratelli, G., De Berardis, D., Ducci, G., Pettorruso, M., Martinotti, G., Di Cesare, G., & Di Giannantonio, M. (2022). Gender differences in attention deficit hyperactivity disorder: an update of the current evidence. *Rivista Di Psichiatria*, *57*(4), 159–164.

Gizani, S., Seremidi, K., Katsouli, K., Markouli, A., & Kloukos, D. (2022). Basic behavioral management techniques in pediatric dentistry: A systematic review and meta-analysis. *Journal of Dentistry*, *126*, 104303. https://doi.org/10.1016/J.JDENT.2022.104303

Gomez, R., Stavropoulos, V., Vance, A., & Griffiths, M. D. (2020). Gifted Children with ADHD: How Are They Different from Non-gifted Children with ADHD? *International Journal of Mental Health and Addiction*, *18*(6), 1467–1481. https://doi.org/10.1007/s11469-019-00125-x

Gupta, P. V. (2016). *Pediatric Dentistry for Special Child* (First Edition). Jaypee Brothers Medical Publishers. https://t.me/RoyalDentistryLibrary/

Haarmann, H. J., George, T., Smaliy, A., & Dien, J. (2012). Remote Associates Test and Alpha Brain Waves. *The Journal of Problem Solving* •, *4*(2), 66. https://doi.org/10.7771/1932-6246.1126

Halperson, E., Badarneh, H., Zion, E., Kruchenezki, H., Goldstein, G., Gavri, S., Zangen, D., & Fux-Noy, A. (2024). Parental awareness and dental health behavior of children with congenital heart disease, with diabetes mellitus, or undergoing anti-cancer treatment, compared to healthy children. *Frontiers in Oral Health*, *5*. https://doi.org/10.3389/froh.2024.1435070

Harumi, L., Fatmawati, R., III Okupasi Terapi, D., Surakarta, P., III Kebidanan Fakultas Ilmu Kesehatan, D., & PKU Muhammadiyah Surakarta, I. (2022). Gambaran Demografi Anak Attention Deficit Hyperactivity Disorder (ADHD) di Yayasan Pembinaaan Anak Cacat (YPAC) Surakarta. *PROFESI (Profesional Islam): Media Publikasi Penelitian*, *19*(2), 152–157.

Honores, M. (2016). *What is Brainwave Entrainment and what is it for?* http://www.meditaudios.com/.

Ingendoh, R. M., Posny, E. S., & Heine, A. (2023a). Binaural beats to entrain the brain? A systematic review of the effects of binaural beat stimulation on brain oscillatory activity, and the implications for psychological research and intervention. *PLoS ONE*, *18*(5 May). https://doi.org/10.1371/journal.pone.0286023

Ingendoh, R. M., Posny, E. S., & Heine, A. (2023b). Binaural beats to entrain the brain? A systematic review of the effects of binaural beat stimulation on brain oscillatory activity, and the implications for psychological research and intervention. *Plos One*, *18*(5 May). https://doi.org/10.1371/journal.pone.0286023

Isik, B. K., Esen, A., Büyükerkmen, B., Kilinç, A., & Menziletoglu, D. (2017). Effectiveness of binaural beats in reducing preoperative dental anxiety. *British Journal of Oral and Maxillofacial Surgery*, *55*(6), 571–574. https://doi.org/10.1016/j.bjoms.2017.02.014

Jerome, D., & Jerome, L. (2020). Approach to diagnosis and management of childhood attention deficit hyperactivity disorder. *Canadian Family Physician*, *66*, 732–736.

Kennel, S., Taylor, A. G., Lyon, D., & Bourguignon, C. (2010). Pilot Feasibility Study of Binaural Auditory Beats for Reducing Symptoms of Inattention in Children and Adolescents with Attention-Deficit/Hyperactivity Disorder. *Journal of Pediatric Nursing*, *25*(1), 3–11. https://doi.org/10.1016/j.pedn.2008.06.010

Khobkham, D., Korwanich, K., & Korwanich, N. (2020). Oral Health and Related Behavior of Children Aged 9–12 with Attention Deficit Hyperactivity Disorder in Tron District, Thailand. *Journal of Dentistry Indonesia*, *27*(1). https://doi.org/10.14693/jdi.v27i1.1120

Kohli, N., Hugar, S. M., Soneta, S. P., Saxena, N., Kadam, K. S., & Gokhale, N. (2022). Psychological behavior management techniques to alleviate dental fear and anxiety in 4-14-year-old children in pediatric dentistry: A systematic review and meta-analysis. *Dental Research Journal*, *1*. www.ncbi.nlm.nih.gov/pmc/journals/1480

Koudelková, Z., & Strmiska, M. (2018). Introduction to the identification of brain waves based on their frequency. *MATEC Web of Conferences*, *210*. https://doi.org/10.1051/matecconf/201821005012

Krasnoff, E., & Chevalier, G. (2023). Case report: binaural beats music assessment experiment. *Frontiers in Human Neuroscience*, *17*. https://doi.org/10.3389/fnhum.2023.1138650

Kupietzky, A. (2022). *Wright's Behavior Management in Dentistry for Children* (3rd Edition). Wiley Blackwell. https://t.me/dent_tech_for_u

Leaf, C., Turner, R. P., Wasserman, C. S., Paulson, R. M., Kopooshian, N., Lynch, G. Z., & Leaf, A. M. G. (2023). Psycho-neuro-biological Correlates of Beta Activity. *NeuroRegulation*, *10*(1), 11–20. https://doi.org/10.15540/nr.10.1.11

Liao, Y. C., Guo, N. W., Su, B. Y., Chen, S. J., Tsai, H. F., & Lee, K. Y. (2021). Frontal Beta Activity in the Meta-Intention of Children With Attention Deficit Hyperactivity Disorder. *Clinical EEG and Neuroscience*, *52*(2), 136–143. https://doi.org/10.1177/1550059420933142

Lopez, M. A. (2019). *Brainwave Entrainment to Improve Problem-solving skills in People with the Neurodevelopmental Disorder ADHD*.

Luo, Y., Weibman, D., Halperin, J. M., & Li, X. (2019). A review of heterogeneity in attention deficit/hyperactivity disorder (ADHD). In *Frontiers in Human Neuroscience* (Vol. 13). Frontiers Media S.A. https://doi.org/10.3389/fnhum.2019.00042

M. Jadeja, N. (2021). *How to Read an EEG* (1st ed.). Cambridge University Press.

Mani, Rekha., Narayanan, Vivek., Venkatesh, Vijay., Rajula, P. B., & Vaishnavi, Abinia. (2023). Effect of Brainwave Entrainment on Perception of Anxiety during Dental Treatment: A Pilot Study. *World Journal of Dentistry*, *14*(12), 1032–1036. https://doi.org/10.2344/0003-3006(2005)52[3:NADFSO]2.0.CO;2

Martin, J. (2024). Why are females less likely to be diagnosed with ADHD in childhood than males? *The Lancet Psychiatry*, *11*(4), 303–310. https://doi.org/10.1016/S2215-0366(24)00010-5

McCoy, K. T., Pancione, K., Hammonds, L. S., & Costa, C. B. (2019). Management of Attention-Deficit/Hyperactivity Disorder in Primary Care. *Nursing Clinics of North America*, *54*(4), 517–532. https://doi.org/10.1016/j.cnur.2019.08.001

Melwani-Sadhwani, R., Alonso-Agustín, E. R., Sagols-Ruiz, A., & Contreras-Madrid, A. I. (2024). Analysis of Oral Health among ADHD-Affected and Non-ADHD Children in Gran Canaria. *Healthcare 2024, Vol. 12, Page 779*, *12*(7), 779. https://doi.org/10.3390/HEALTHCARE12070779

Menziletoglu, D., Guler, A. Y., Cayır, T., & Isik, B. K. (2021). Binaural beats or 432 Hz music? Which method is more effective for reducing preoperative dental anxiety? *Medicina Oral Patologia Oral y Cirugia Bucal*, *26*(1), e97–e101. https://doi.org/10.4317/medoral.24051

Milind Gurav, K., Kulkarni, N., Shetty, V., Vinay, V., Borade, P., Ghadge, S., & Bhor, K. (2022). Effectiveness of Audio and Audio-Visual Distraction Aids for Management of Pain and Anxiety Effectiveness of Audio and Audio-Visual Distraction Aids for Management of Pain and Anxiety in Children and Adults Undergoing Dental Treatment-A Systematic Review And Meta-Analysis Effectiveness of Audio and Audio-Visual Distraction Aids for Management of Pain and Anxiety. *The Journal of Clinical Pediatric Dentistry*, *46*(2), 2022. https://doi.org/10.17796/1053-4625-46.2.2

Moradi, S., & Orrell, L. (2021). *The Effect of Theta Binaural Beats on Executive Functions, Heart Rate Variability, Self-Rated Stress and Tiredness*.

Nair, C. C., J Nair, S. M., Beevi, F. U., Professor, A., & Professor, A. (2020a). A Review on Brainwave Therapy. *Fathima Beevi U. A Review on Brainwave Therapy. World J Pharm Sci*, *8*(11), 59–66. http://www.wjpsonline.org/

Nair, C. C., J Nair, S. M., Beevi, F. U., Professor, A., & Professor, A. (2020b). World Journal of Pharmaceutical Sciences A Review on Brainwave Therapy. *Fathima Beevi U. A Review on Brainwave Therapy. World J Pharm Sci*, *8*(11), 59–66. http://www.wjpsonline.org/

Padawe, D., Chettiankandy, T. J., Rathi, G. V., Sachdev, S. S., Takate, V. S., & Yadav, T. (2023). Effectivity of Binaural Beats in Reduction of Anxiety during Dental Treatment in Pediatric Patients. *Global Journal of Medical, Pharmaceutical, and Biomedical Update*, *18*, 3. https://doi.org/10.25259/gjmpbu_117_2022

Palacios-García, I., Silva, J., Villena-González, M., Campos-Arteaga, G., Artigas-Vergara, C., Luarte, N., Rodríguez, E., & Bosman, C. A. (2021). Increase in Beta Power Reflects Attentional Top-Down Modulation After Psychosocial Stress Induction. *Frontiers in Human Neuroscience*, *15*. https://doi.org/10.3389/fnhum.2021.630813

Polanczyk, G. V., Salum, G. A., Sugaya, L. S., Caye, A., & Rohde, L. A. (2015). Annual research review: A meta-analysis of the worldwide prevalence of mental disorders in children and adolescents. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, *56*(3), 345–365. https://doi.org/10.1111/jcpp.12381

Posner, J., Polanczyk, G. V., & Sonuga-Barke, E. (2020). Attention-deficit hyperactivity disorder. *The Lancet, 395*(10222), 450–462. https://doi.org/10.1016/S0140-6736(19)33004-1

Prof. Seema Vinayak, Simplejit Kaur Dhanoa, & Dr. Aparna Ashtaputre- Sisode. (2016). Emotions and Brain Waves. *International Journal of Indian Psychology*, *3*(2). https://doi.org/10.25215/0302.075

Rachel Minkin, B., Horowitz, J., & Parker, K. (2023). Parenting in America Today. *Pew Research Center*, *24*, 2023. www.pewresearch.org

Salam T.A, A., Ummer, M., Abdullah Alowairdhi, A., Khalid Alsubait, A., Marwan Aljuhani, S., Abdullah Alzahrani, A., & Ali Alqahtani, A. (2023). Management of Attention-Deficit Hyperactivity Disorder Children for Dental Procedures. *Cureus*. https://doi.org/10.7759/cureus.36989

Salehabadi, N., Pakravan, A., Rasti, R., Pourasghar, M., Mousavi, S. J., & Saravi, M. E. (2023). Can Binaural Beat Music Be Useful as a Method to Reduce Dental Patients' Anxiety? *International Dental Journal*. https://doi.org/10.1016/j.identj.2023.11.009

Sarvas, E., Webb, J., Landrigan-Ossar, M., Yin, L., Karp, J. M., Beyer, E. L., Brooks, C., Feldman, L. M., Kimball, C. E., Tate, A. R., Sokal-Gutierrez, K., Unkel, J. H., Zaborowski, M., Crespin, M., Moursi, A., Beskin, K., Noritz, G., Agrawal, R., Bell, D., … Riefe, J. (2024). Oral Health Care for Children and Youth With Developmental Disabilities: Clinical Report. *Pediatrics*, *154*(2). https://doi.org/10.1542/peds.2024-067603

Scully, C. (2007). *Special Care in Dentistry (Handbook of Oral Healthcare)*. Elsevier.

Serrano-Barroso, A., Siugzdaite, R., Guerrero-Cubero, J., Molina-Cantero, A. J., Gomez-Gonzalez, I. M., Lopez, J. C., & Vargas, J. P. (2021). Detecting attention levels in adhd children with a video game and the measurement of brain activity with a single-channel bci headset. *Sensors*, *21*(9). https://doi.org/10.3390/s21093221

Sharma, V., Rathore, S., & Goswami, N. (2023). Binaural Auditory Beats for Reducing Attention Deficit Disorder. In *International Journal of Research Publication and Reviews* (Vol. 4, Issue 1). www.ijrpr.com

Shehani A, F., Samuel A, V., Ramar, K., & Mani, R. (2024). Effectiveness of Preoperative Alpha Wave Entrainment in Pediatric Dental Patients: A Randomized Controlled Trial. *Cureus*. https://doi.org/10.7759/cureus.60154

Shim, Y.-S., Kim, A.-H., Jeon, E.-Y., & An, S.-Y. (2015). Dental fear & anxiety and dental pain in children and adolescents; a systemic review. *Journal of Dental Anesthesia and Pain Medicine*, *15*(2), 53. https://doi.org/10.17245/jdapm.2015.15.2.53

Sinha, S., Praveen, P., Rani, S. P., & Anantharaj, A. (2018). Pedodontic Considerations in a Child with Attention Deficit Hyperactivity Disorder: Literature Review and a Case Report. *International Journal of Clinical Pediatric Dentistry*, *11*(3), 254–259. https://doi.org/10.5005/jp-journals-10005-1522

Tenev, V. (2024). Undiagnosed ADHD and Burnout Syndrome – is Untreated ADHD A Risk Factor for Burnout Syndrome? *International Journal on Neuropsychology and Behavioural Sciences*, *5*(1). https://doi.org/10.51626/ijnbs.2024.05.00050

Uchôa, S. A. C. L., Corrêa, S. C. L., Corrêa, D. L., Corrêa, V. C., & Dias, H. B. (2024). Behavioral management techniques in pediatric dentistry: a literature review. *Health of Tomorrow: Innovations and Academic Research*. https://doi.org/10.56238/sevened2023.007-039

Yap, A. (2017). Oral Health Equals Total Health: A Brief Review. *Journal of Dentistry Indonesia*, *24*(2). https://doi.org/10.14693/jdi.v24i2.1122

Yudhana, A., Azhari, A., Muslim, A., Mukhopadhyay, S., Miksa Mardhia, M., Rakip Karas, I., Ali Akbar, S., & Irbati Ammatulloh, F. (2019). Recognizing Human Emotion patterns by applying Fast Fourier Transform based on Brainwave Features. *International Conference on Informatics, Multimedia, Cyber and Information System (ICIMCIS)*.

LAMPIRAN

Lampiran 1. *Curriculum Vitae*

A. Data Pribadi

1. Nama   : Indira Ayu Suryandari Idul
2. Tempat, tgl, lahir   : Jakarta, 03 Desember 1998
3. Suku / Bangsa   : Bugis / Indonesia
4. Agama   : Islam
5. Alamat   : Jl. Borong Raya Kompleks Deltamas 2
6. Email   : ayindiraa@gmail.com

B. Riwayat Pendidikan

1. Tamat SMA tahun 2015 di SMA Islam Athirah Makassar
2. Sarjana (S1) tahun 2019 di Universitas Muslim Indonesia
3. Profesi tahun 2021 di Universitas Muslim Indonesia
4.

C. Pekerjaan dan Riwayat Pekerjaan

- Jenis Pekerjaan   : Dokter Gigi Wiraswasta

Lampiran 2. Surat Ijin Penelitian

KEMENTERIAN PENDIDIKAN, KEBUDAYAAN,
RISET, DAN TEKNOLOGI
UNIVERSITAS HASANUDDIN
FAKULTAS KEDOKTERAN GIGI
Jalan Perintis Kemerdekaan Km. 10, Makassar 90245
Telepon (0411) 586012, Faximile (0411) 584641
Laman www.unhas.ac.id Email fdhu@unhas.ac.id

Nomor   : 04210/UN4.13/PT.01.04/2024   30 Juli 2024
Hal   : **Izin Penelitian**

Yth. **Direktur Rumah Sakit Gigi dan Mulut Pendidikan (RSGMP)**
Universitas Hasanuddin
Makassar

Dengan hormat, kami sampaikan bahwa mahasiswa **Program Studi Pendidikan Dokter Gigi Spesialis (PPDGS) Kedokteran Gigi Anak** Fakultas Kedokteran Gigi Universitas Hasanuddin bermaksud untuk melakukan penelitian.

Sehubungan dengan hal tersebut, mohon kiranya dapat diberikan **izin penelitian** kepada peneliti di bawah ini:

Nama / NIM   : **Indira Ayu Suryandari Idul / J065212006**
Waktu Penelitian : Juli s.d. September 2024
Tempat Penelitian : Poli Kedokteran Gigi Anak Rumah Sakit Gigi dan Mulut Pendidikan (RSGMP) Universitas Hasanuddin
Pembimbing   : 1. Prof. Dr. Muh. Harun Achmad, drg., M.Kes., Sp.KGA., KKA(K)., FSASS.
                      2. Syakriani Syahrir, drg., Sp.KGA. Subsp.AIBK (K).
Judul Penelitian : Pengaruh *Binaural Beats* terhadap *Brainwave* α pada *Dental Anxiety* Anak *Attention Deficit Hyperactivity Disorder* (ADHD)

Demikian permohonan kami. Atas perhatian dan kerjasama yang baik, diucapkan terima kasih.

a.n. Dekan,
Wakil Dekan Bidang Akademik dan Kemahasiswaan

Acing Habibie Mude, drg., Ph.D., Sp.Pros., Subsp.OGST(K).

Tembusan: NIP 198102072008121002
1. Dekan FKG Unhas (sebagai laporan);
2. Kepala Bagian Tata Usaha FKG Unhas.

Lampiran 3. Surat Persetujuan Etik

KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET, DAN TEKNOLOGI
UNIVERSITAS HASANUDDIN
FAKULTAS KEDOKTERAN GIGI
RUMAH SAKIT GIGI DAN MULUT PENDIDIKAN
KOMITE ETIK PENELITIAN KESEHATAN
Sekretariat : Lantai 1, Ruang Komite Etik FKG Unhas
JL.Perintis kemerdekaan KM.10, Makassar
Kontak: Admin KE Pk FKG +628225195813A , e-mail: etik.fkg@unhas.ac.id

No. Reg. Protokol : 207/FKGUH/PPDGS_Pedo-012/VIII/2024

PERSETUJUAN ETIK
ETHICAL APPROVAL
No: 038/KEPK FKG-RSGMP UH/EA/X/2024

Komite Etik Penelitian Kesehatan Fakultas Kedokteran Gigi Universitas Hasanuddin Makassar, dalam upaya melindungi hak asasi dan kesejahteraan subjek penelitian serta menjamin bahwa penelitian berjalan sesuai dengan pedoman International *Conference on Harmonization – Good Clinical Practice* (ICH-GCP) dan aturan lainnya yang berlaku, telah mengkaji dengan teliti dan menyetujui proposal penelitian berjudul:

The Health Research Ethics Committee Faculty of Dentistry Hasanuddin University Makassar, in an effort to protect the basic rights and welfare of the subject of the research and to assure that the research operates in accordance with International Conference on Harmonization – Good Clinical Practice (ICH-GCP) guidelines and other applicable laws and regulations, has thoroughly reviewed and approved a research proposal entitled:

"Pengaruh *Binaural Beats* terhadap *Brainwave* α pada *Dental Anxiety* Anak *Attention Deficit Hyperactivity Disorder* (ADHD)"

Versi Protokol	:	0
Versi ICF	:	0
Nama Peneliti Utama *Principal Researcher*	:	drg. Indira Ayu Suryandari Idul
Pembimbing/Peneliti Lain *Supervisor/Other Researcher*	:	1. Prof. Dr. drg. Muhammad Harun Achmad, M.Kes, Sp.KGA., K-KKA., FSASS. 2. drg. Syakriani Syahrir, Sp.KGA., Subsp. AIBK (K)
Lokasi Penelitian *Research Site*	:	Poli Kedokteran Gigi Anak Rumah Sakit Gigi dan Mulut Pendidikan (RSGMP) Universitas Hasanuddin
Nama Institusi *Institution*	:	Fakultas Kedokteran Gigi Universitas Indonesia

Proposal tersebut dapat disetujui pelaksanaannya.
Hereby declare that the proposal is approved.

Ditetapkan di *Issued in*	:	Makassar
Tanggal *Date*	:	11 Oktober 2024

Ketua
Chairman

Erni Marlina, drg., Ph.D., Sp.PM., Subsp.Inf (K)
NIP. 197506012009122001

1

Lampiran 4. Dokumentasi Penelitian

Lampiran 5. Hasil Analisis Data SPSS

Notes

Output Created		11-NOV-2024 20:06:59
Comments		
Input	Data	D:\Office\Statistics\Data drg Indira.sav
	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	34
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table.
Syntax		CROSSTABS /TABLES=JK BY Kelompok /FORMAT=AVALUE TABLES /STATISTICS=CHISQ /CELLS=COUNT COLUMN /COUNT ROUND CELL.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02
	Dimensions Requested	2
	Cells Available	524245

Case Processing Summary

Cases

	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
JK * Kelompok	34	100.0%	0	0.0%	34	100.0%

JK * Kelompok Crosstabulation

			Kelompok		
			Normal	ADHD	Total
JK	Laki-laki	Count	6	13	19
		% within Kelompok	35.3%	76.5%	55.9%
	Perempuan	Count	11	4	15
		% within Kelompok	64.7%	23.5%	44.1%
Total		Count	17	17	34
		% 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	5.846[a]	1	.016		
Continuity Correction[b]	4.295	1	.038		
Likelihood Ratio	6.038	1	.014		
Fisher's Exact Test				.037	.018
Linear-by-Linear Association	5.674	1	.017		
N of Valid Cases	34				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.50.

b. Computed only for a 2x2 table

```
MEANS TABLES=Usia Pre Post Delta BY Kelompok
  /CELLS=MEAN STDDEV MEDIAN MIN MAX.
```

Means

Notes

Output Created		11-NOV-2024 20:07:17
Comments		
Input	Data	D:\Office\Statistics\Data drg Indira.sav
	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	34
Missing Value Handling	Definition of Missing	For each dependent variable in a table, user-defined missing values for the dependent and all grouping variables are treated as missing.
	Cases Used	Cases used for each table have no missing values in any independent variable, and not all dependent variables have missing values.
Syntax		MEANS TABLES=Usia Pre Post Delta BY Kelompok /CELLS=MEAN STDDEV MEDIAN MIN MAX.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Usia * Kelompok	34	100.0%	0	0.0%	34	100.0%

	34	100.0%	0	0.0%	34	100.0%
Pre * Kelompok	34	100.0%	0	0.0%	34	100.0%
Post * Kelompok	34	100.0%	0	0.0%	34	100.0%
Delta * Kelompok	34	100.0%	0	0.0%	34	100.0%

Report

Kelompok		Usia	Pre	Post	Delta
Normal	Mean	10.2353	42.9412	62.6471	19.7059
	Std. Deviation	3.91359	14.03776	16.59421	16.53317
	Median	8.0000	45.0000	60.0000	20.0000
	Minimum	5.00	25.00	35.00	-25.00
	Maximum	17.00	70.00	90.00	40.00
ADHD	Mean	6.7647	46.2941	53.2353	6.9412
	Std. Deviation	2.72785	17.25820	10.59793	20.03893
	Median	5.0000	50.0000	50.0000	5.0000
	Minimum	5.00	15.00	40.00	-25.00
	Maximum	15.00	70.00	70.00	40.00
Total	Mean	8.5000	44.6176	57.9412	13.3235
	Std. Deviation	3.75984	15.58363	14.51841	19.21445
	Median	7.5000	45.0000	55.0000	20.0000
	Minimum	5.00	15.00	35.00	-25.00
	Maximum	17.00	70.00	90.00	40.00

```
EXAMINE VARIABLES=Usia Pre Post Delta
  /PLOT BOXPLOT STEMLEAF NPPLOT
  /COMPARE GROUPS
  /STATISTICS DESCRIPTIVES
  /CINTERVAL 95
  /MISSING LISTWISE
  /NOTOTAL.
```

Explore

Notes

Output Created		11-NOV-2024 20:07:27
Comments		
Input	Data	D:\Office\Statistics\Data drg Indira.sav
	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	34
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.
Syntax		EXAMINE VARIABLES=Usia Pre Post Delta /PLOT BOXPLOT STEMLEAF NPPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES /CINTERVAL 95 /MISSING LISTWISE /NOTOTAL.
Resources	Processor Time	00:00:04.22
	Elapsed Time	00:00:03.17

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Usia	34	100.0%	0	0.0%	34	100.0%
Pre	34	100.0%	0	0.0%	34	100.0%
Post	34	100.0%	0	0.0%	34	100.0%
Delta	34	100.0%	0	0.0%	34	100.0%

Descriptives

			Statistic	Std. Error
Usia	Mean		8.5000	.64481
	95% Confidence Interval for Mean	Lower Bound	7.1881	
		Upper Bound	9.8119	
	5% Trimmed Mean		8.2451	
	Median		7.5000	
	Variance		14.136	
	Std. Deviation		3.75984	
	Minimum		5.00	
	Maximum		17.00	
	Range		12.00	
	Interquartile Range		5.75	
	Skewness		.900	.403
	Kurtosis		-.474	.788
Pre	Mean		44.6176	2.67257
	95% Confidence Interval for Mean	Lower Bound	39.1803	
		Upper Bound	50.0550	
	5% Trimmed Mean		44.7386	
	Median		45.0000	
	Variance		242.849	
	Std. Deviation		15.58363	

	Minimum	15.00	
	Maximum	70.00	
	Range	55.00	
	Interquartile Range	26.25	
	Skewness	-.004	.403
	Kurtosis	-1.042	.788
Post	Mean	57.9412	2.48989
	95% Confidence Interval for Mean — Lower Bound	52.8755	
	95% Confidence Interval for Mean — Upper Bound	63.0069	
	5% Trimmed Mean	57.4346	
	Median	55.0000	
	Variance	210.784	
	Std. Deviation	14.51841	
	Minimum	35.00	
	Maximum	90.00	
	Range	55.00	
	Interquartile Range	25.00	
	Skewness	.666	.403
	Kurtosis	-.394	.788
Delta	Mean	13.3235	3.29525
	95% Confidence Interval for Mean — Lower Bound	6.6193	
	95% Confidence Interval for Mean — Upper Bound	20.0278	
	5% Trimmed Mean	13.9706	
	Median	20.0000	
	Variance	369.195	
	Std. Deviation	19.21445	
	Minimum	-25.00	
	Maximum	40.00	
	Range	65.00	
	Interquartile Range	30.00	
	Skewness	-.565	.403
	Kurtosis	-.765	.788

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Usia	.229	34	.000	.838	34	.000
Pre	.120	34	.200*	.958	34	.210
Post	.178	34	.008	.927	34	.025
Delta	.195	34	.002	.927	34	.026

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

a. Lilliefors Significance Correction

```
NPAR TESTS
  /M-W= Usia Post Delta BY Kelompok(1 2)
  /MISSING ANALYSIS.
```

NPar Tests

Notes

Output Created		11-NOV-2024 20:07:48
Comments		
Input	Data	D:\Office\Statistics\Data drg Indira.sav
	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	34
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.

Syntax		NPAR TESTS
		/M-W= Usia Post Delta BY
		Kelompok(1 2)
		/MISSING ANALYSIS.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02
	Number of Cases Allowed[a]	349525

a. Based on availability of workspace memory.

Mann-Whitney Test

Ranks

	Kelompok	N	Mean Rank	Sum of Ranks
Usia	Normal	17	22.32	379.50
	ADHD	17	12.68	215.50
	Total	34		
Post	Normal	17	20.47	348.00
	ADHD	17	14.53	247.00
	Total	34		
Delta	Normal	17	20.76	353.00
	ADHD	17	14.24	242.00
	Total	34		

Test Statistics[a]

	Usia	Post	Delta
Mann-Whitney U	62.500	94.000	89.000
Wilcoxon W	215.500	247.000	242.000
Z	-2.886	-1.757	-1.923
Asymp. Sig. (2-tailed)	.004	.079	.055
Exact Sig. [2*(1-tailed Sig.)]	.004[b]	.085[b]	.057[b]

a. Grouping Variable: Kelompok

b. Not corrected for ties.

```
T-TEST GROUPS=Kelompok(1 2)
  /MISSING=ANALYSIS
  /VARIABLES=Pre
  /ES DISPLAY(TRUE)
  /CRITERIA=CI(.95).
```

T-Test

Notes

Output Created		11-NOV-2024 20:07:59
Comments		
Input	Data	D:\Office\Statistics\Data drg Indira.sav
	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	34
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.

Syntax		T-TEST GROUPS=Kelompok(1 2)
		/MISSING=ANALYSIS
		/VARIABLES=Pre
		/ES DISPLAY(TRUE)
		/CRITERIA=CI(.95).
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Pre	Normal	17	42.9412	14.03776	3.40466
	ADHD	17	46.2941	17.25820	4.18573

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Pre	Equal variances assumed	1.129	.296	-.621	32
	Equal variances not assumed			-.621	30.726

Independent Samples Test

t-test for Equality of Means

		Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower
Pre	Equal variances assumed	.539	-3.35294	5.39556	-14.34333
	Equal variances not assumed	.539	-3.35294	5.39556	-14.36123

Independent Samples Test

		t-test for Equality of Means 95% Confidence Interval of the Difference Upper
Pre	Equal variances assumed	7.63745
	Equal variances not assumed	7.65535

Independent Samples Effect Sizes

		Standardizer[a]	Point Estimate	95% Confidence Interval Lower	Upper
Pre	Cohen's d	15.73061	-.213	-.886	.463
	Hedges' correction	16.11171	-.208	-.865	.452
	Glass's delta	17.25820	-.194	-.867	.484

a. The denominator used in estimating the effect sizes.

Cohen's d uses the pooled standard deviation.

Hedges' correction uses the pooled standard deviation, plus a correction factor.

Glass's delta uses the sample standard deviation of the control group.

```
EXAMINE VARIABLES=Pre Post BY Kelompok
  /PLOT BOXPLOT STEMLEAF NPPLOT
  /COMPARE GROUPS
  /STATISTICS DESCRIPTIVES
  /CINTERVAL 95
  /MISSING LISTWISE
  /NOTOTAL.
```

Explore

Notes

Output Created		11-NOV-2024 20:08:10
Comments		
Input	Data	D:\Office\Statistics\Data drg Indira.sav
	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	34
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.
Syntax		EXAMINE VARIABLES=Pre Post BY Kelompok /PLOT BOXPLOT STEMLEAF NPPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES /CINTERVAL 95 /MISSING LISTWISE /NOTOTAL.
Resources	Processor Time	00:00:02.88
	Elapsed Time	00:00:01.02

Kelompok

Case Processing Summary

		Cases					
		Valid		Missing		Total	
	Kelompok	N	Percent	N	Percent	N	Percent
Pre	Normal	17	100.0%	0	0.0%	17	100.0%
	ADHD	17	100.0%	0	0.0%	17	100.0%
Post	Normal	17	100.0%	0	0.0%	17	100.0%
	ADHD	17	100.0%	0	0.0%	17	100.0%

Descriptives

	Kelompok			Statistic	Std. Error
Pre	Normal	Mean		42.9412	3.40466
		95% Confidence Interval for Mean	Lower Bound	35.7236	
			Upper Bound	50.1587	
		5% Trimmed Mean		42.4346	
		Median		45.0000	
		Variance		197.059	
		Std. Deviation		14.03776	
		Minimum		25.00	
		Maximum		70.00	
		Range		45.00	
		Interquartile Range		25.00	
		Skewness		.250	.550
		Kurtosis		-.971	1.063
	ADHD	Mean		46.2941	4.18573
		95% Confidence Interval for Mean	Lower Bound	37.4208	
			Upper Bound	55.1675	
		5% Trimmed Mean		46.7157	
		Median		50.0000	
		Variance		297.846	
		Std. Deviation		17.25820	
		Minimum		15.00	
		Maximum		70.00	
		Range		55.00	
		Interquartile Range		31.50	
		Skewness		-.253	.550

		Kurtosis		-1.028	1.063

Post	Normal	Mean		62.6471	4.02469
		95% Confidence Interval for Mean	Lower Bound	54.1151	
			Upper Bound	71.1790	
		5% Trimmed Mean		62.6634	
		Median		60.0000	
		Variance		275.368	
		Std. Deviation		16.59421	
		Minimum		35.00	
		Maximum		90.00	
		Range		55.00	
		Interquartile Range		30.00	
		Skewness		.272	.550
		Kurtosis		-1.023	1.063
	ADHD	Mean		53.2353	2.57038
		95% Confidence Interval for Mean	Lower Bound	47.7863	
			Upper Bound	58.6842	
		5% Trimmed Mean		53.0392	
		Median		50.0000	
		Variance		112.316	
		Std. Deviation		10.59793	
		Minimum		40.00	
		Maximum		70.00	
		Range		30.00	
		Interquartile Range		17.50	
		Skewness		.527	.550
		Kurtosis		-1.166	1.063

Tests of Normality

	Kelompok	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Pre	Normal	.175	17	.177	.933	17	.243
	ADHD	.114	17	.200[*]	.950	17	.459
Post	Normal	.152	17	.200[*]	.938	17	.293

ADHD	.208	17	.049	.878	17	.030

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

a. Lilliefors Significance Correction

```
USE ALL.
COMPUTE filter_$=(Kelompok = 1).
VARIABLE LABELS filter_$ 'Kelompok = 1 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
T-TEST PAIRS=Pre WITH Post (PAIRED)
  /ES DISPLAY(TRUE) STANDARDIZER(SD)
  /CRITERIA=CI(.9500)
  /MISSING=ANALYSIS.
```

T-Test

Notes

Output Created		11-NOV-2024 20:08:42
Comments		
Input	Data	D:\Office\Statistics\Data drg Indira.sav
	Active Dataset	DataSet4
	Filter	Kelompok = 1 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	17
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.

Syntax		T-TEST PAIRS=Pre WITH Post (PAIRED) /ES DISPLAY(TRUE) STANDARDIZER(SD) /CRITERIA=CI(.9500) /MISSING=ANALYSIS.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre	42.9412	17	14.03776	3.40466
	Post	62.6471	17	16.59421	4.02469

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pre & Post	17	.427	.087

Paired Samples Test

		Paired Differences				
					95% Confidence Interval of the Difference	
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper
Pair 1	Pre - Post	-19.70588	16.53317	4.00988	-28.20645	-11.20531

Paired Samples Test

		t	df	Sig. (2-tailed)
Pair 1	Pre - Post	-4.914	16	.000

Paired Samples Effect Sizes

			Standardizer[a]	Point Estimate	95% Confidence Interval	
					Lower	Upper
Pair 1	Pre - Post	Cohen's d	16.53317	-1.192	-1.809	-.554
		Hedges' correction	16.93370	-1.164	-1.766	-.541

a. The denominator used in estimating the effect sizes.

Cohen's d uses the sample standard deviation of the mean difference.

Hedges' correction uses the sample standard deviation of the mean difference, plus a correction factor.

```
USE ALL.
COMPUTE filter_$=(Kelompok = 2).
VARIABLE LABELS filter_$ 'Kelompok = 2 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
NPAR TESTS
  /WILCOXON=Pre WITH Post (PAIRED)
  /MISSING ANALYSIS.
```

NPar Tests

Notes

Output Created		11-NOV-2024 20:09:24
Comments		
Input	Data	D:\Office\Statistics\Data drg Indira.sav
	Active Dataset	DataSet4
	Filter	Kelompok = 2 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	17

Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax		NPAR TESTS /WILCOXON=Pre WITH Post (PAIRED) /MISSING ANALYSIS.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00
	Number of Cases Allowed[a]	449389

a. Based on availability of workspace memory.

Wilcoxon Signed Ranks Test

Ranks

		N	Mean Rank	Sum of Ranks
Post - Pre	Negative Ranks	6[a]	5.75	34.50
	Positive Ranks	9[b]	9.50	85.50
	Ties	2[c]		
	Total	17		

a. Post < Pre

b. Post > Pre

c. Post = Pre

Test Statistics[a]

	Post - Pre
Z	-1.452[b]
Asymp. Sig. (2-tailed)	.147

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.