

# TDCS and Cognition in Schizophrenia

## Search Strategy:

(DE "Cognition" OR DE "Mental Lexicon" OR DE "Mind Wandering") OR (AB Cognition or cognitive or attenti\* or executive or verbal or memory or intelligence or "Negative symp\*")

AND

(DE "Schizophrenia" OR DE "Acute Schizophrenia" OR DE "Catatonic Schizophrenia" OR DE "Childhood Schizophrenia" OR DE "Paranoid Schizophrenia" OR DE "Process Schizophrenia" OR DE "Schizoaffective Disorder" OR DE "Schizophrenia (Disorganized Type)" OR DE "Schizophreniform Disorder" OR DE "Undifferentiated Schizophrenia" ) OR (AB "schizo\*")

AND

(DE "Transcranial Direct Current Stimulation" ) OR (AB "Transcranial Direct Current Stimulation" ) OR (AB tdcS)

**Limits:** English Language

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## PsychINFO

A pilot study investigating the effect of transcranial direct current stimulation on the electrophysiological correlates of working memory in patients with schizophrenia.

Academic Journal

Moon, Sun-Young; Kim, Minah; Hwang, Wu Jeong; Lee, Tae Young; Kwon, Jun Soo; Psychiatry Research: Neuroimaging, Vol 284, Feb 28, 2019 pp. 9-12. Publisher: Elsevier Science; [Journal Article]

Subjects: Cognition; Evoked Potentials; Schizophrenia; Short Term Memory; Transcranial Direct Current Stimulation

Effect of fronto-temporal transcranial direct current stimulation on corollary discharge in schizophrenia: A randomized, double-blind, sham-controlled mediation analysis study.

Academic Journal

Bose, Anushree; Nawani, Hema; Agarwal, Sri Mahavir; Shivakumar, Venkataram; Kalmady, Sunil V.; Shenoy, Sonia; Sreeraj, Vanteemar S.; Narayanaswamy, Janardhanan C.; Kumar, Devvarta; Venkatasubramanian, Ganesan; Schizophrenia Research, Vol 204, Feb, 2019 pp. 411-412. Publisher: Elsevier Science; [Letter]

Subjects: Auditory Hallucinations; Electrical Stimulation; Frontal Lobe; Schizophrenia; Temporal Lobe; Adulthood (18 yrs & older); Male; Female

Transcranial direct-current stimulation in ultra-treatment-resistant schizophrenia.

Academic Journal

Lindenmayer, J. P.; Kulsa, Mila Kirstie C.; Sultana, Tania; Kaur, Amandeep; Yang, Ran; Ljuri, Isidora; Parker, Benedicto; Khan, Anzalee; Brain Stimulation, Vol 12(1), Jan-Feb, 2019 pp. 54-61. Publisher: Elsevier Science; [Journal Article]

Subjects: Auditory Hallucinations; Cognitive Ability; Electrical Brain Stimulation; Schizophrenia; Treatment Resistant Disorders; Adulthood (18 yrs & older); Young Adulthood (18-29 yrs); Thirties (30-39 yrs); Middle Age (40-64 yrs); Aged (65 yrs & older); Male; Female

Refining strategies to drive cognitive gains through transcranial electrical stimulation.

Academic Journal

Mehta, Urvakhsh Meherwan; Schizophrenia Research, Vol 202, Dec, 2018 pp. 46-47. Publisher: Elsevier Science; [Comment/Reply]

Subjects: Electrical Brain Stimulation; Schizophrenia; Short Term Memory

Improving working memory in schizophrenia: Effects of 1 mA and 2 mA transcranial direct current stimulation to the left DLPFC.

Academic Journal

Papazova, Irina; Strube, Wolfgang; Becker, Benedikt; Henning, Bettina; Schwippel, Tobias; Fallgatter, Andreas J.; Padberg, Frank; Palm, Ulrich; Falkai, Peter; Plewnia, Christian; Hasan, Alkomiet; Schizophrenia Research, Vol 202, Dec, 2018 pp. 203-209. Publisher: Elsevier Science; [Journal Article]

Subjects: Electrical Brain Stimulation; Prefrontal Cortex; Schizophrenia; Short Term Memory; Adulthood (18 yrs & older); Male; Female

Beneficial effects of anodal transcranial direct current stimulation (tDCS) on spatial working memory in patients with schizophrenia.

Academic Journal

Schwippel, T.; Papazova, I.; Strube, W.; Fallgatter, A. J.; Hasan, A.; Plewnia, C.; European Neuropsychopharmacology, Vol 28(12), Dec, 2018 pp. 1339-1350. Publisher: Elsevier Science; [Journal Article]

Subjects: Schizophrenia; Severity (Disorders); Spatial Memory; Transcranial Direct Current Stimulation; Adulthood (18 yrs & older); Young Adulthood (18-29 yrs); Thirties (30-39 yrs); Middle Age (40-64 yrs); Male; Female

The effects of add-on fronto-temporal transcranial direct current stimulation (tDCS) on auditory verbal hallucinations, other psychopathological symptoms, and insight in schizophrenia: A randomized, double-blind, sham-controlled trial. Open Access

Academic Journal

Chang, Chuan-Chia; Tzeng, Nian-Sheng; Chao, Che-Yi; Yeh, Chin-Bin; Chang, Hsin-An; International Journal of Neuropsychopharmacology, Vol 21(11), Nov, 2018 pp. 979-987. Publisher: Oxford University Press; [Journal Article]

Subjects: Schizophrenia; Transcranial Magnetic Stimulation; Treatment Effectiveness Evaluation; Adulthood (18 yrs & older); Young Adulthood (18-29 yrs); Thirties (30-39 yrs); Middle Age (40-64 yrs); Aged (65 yrs & older); Male; Female

Adjunct transcranial direct current stimulation improves cognitive function in patients with schizophrenia: A double-blind 12-week study.

Academic Journal

Jeon, Dong-Wook; Jung, Do-Un; Kim, Sung-Jin; Shim, Joo-Cheol; Moon, Jung-Joon; Seo, Young-Soo; Jung, Sung-Soo; Seo, Beom-Joo; Kim, Jeong-Eun; Oh, Minkyung; Kim, You-Na; Schizophrenia Research, Vol 197, Jul, 2018 pp. 378-385. Publisher: Elsevier Science; [Journal Article]

Subjects: Cognitive Ability; Major Depression; Schizophrenia; Symptoms; Transcranial Magnetic Stimulation; Adulthood (18 yrs & older); Male; Female

Moderate effects of noninvasive brain stimulation of the frontal cortex for improving negative symptoms in schizophrenia: Meta-analysis of controlled trials. Open Access Academic Journal

Aleman, André; Enriquez-Geppert, Stefanie; Knegtering, Henderikus; Dlabac-de Lange, Jozarni J.; Neuroscience and Biobehavioral Reviews, Vol 89, Jun, 2018 pp. 111-118. Publisher: Elsevier Science; [Journal Article]

Subjects: Electrical Brain Stimulation; Schizophrenia; Transcranial Magnetic Stimulation

Transcranial direct current stimulation, symptomatology, and cognition in psychosis: A qualitative review. Open Access Academic Journal

Gupta, Tina; Kelley, Nicholas J.; Pelletier-Baldelli, Andrea; Mittal, Vijay A.; Frontiers in Behavioral Neuroscience, Vol 12, May 28, 2018 ArtID: 94. Publisher: Frontiers Media S.A.; [Journal Article]

Subjects: Electrical Brain Stimulation; Neurocognition; Psychiatric Symptoms; Psychosis; Schizophrenia

Non-invasive brain stimulation for negative symptoms in schizophrenia: An updated systematic review and meta-analysis.

Academic Journal

Osoegawa, Caio; Gomes, July Silveira; Grigolon, Ruth Bartelli; Brietzke, Elisa; Gadelha, Ary; Lacerda, Acioly L.T.; Dias, Álvaro Machado; Cordeiro, Quirino; Laranjeira, Ronaldo; de Jesus, Danilo; Daskalakis, Zafiris Jeff; Brunelin, Jerome; Cordes, Joachim; Trevizol, Alisson Paulino; Schizophrenia Research Publisher: Elsevier Science;

Subjects: Transcranial Direct Current Stimulation

Parameter-based evaluation of attentional impairments in schizophrenia and their modulation by prefrontal transcranial direct current stimulation. Open Access

Academic Journal

Göbler, Nadine; Papazova, Irina; Oviedo-Salcedo, Tatiana; Filipova, Nina; Strube, Wolfgang; Funk, Johanna; Müller, Hermann J.; Finke, Kathrin; Hasan, Alkomiet; Frontiers in Psychiatry, Vol 8, Nov 29, 2017 ArtID: 259. Publisher: Frontiers Media S.A.; [Journal Article]

Subjects: Prefrontal Cortex; Schizophrenia; Transcranial Magnetic Stimulation; Adulthood (18 yrs & older); Male; Female

Effect of transcranial direct current stimulation on functional capacity in schizophrenia: A study protocol for a randomized controlled trial. Open Access

Academic Journal

Narita, Zui; Inagawa, Takuma; Maruo, Kazushi; Sueyoshi, Kazuki; Sumiyoshi, Tomiki; Frontiers in Psychiatry, Vol 8, Nov 13, 2017 ArtID: 233. Publisher: Frontiers Media S.A.; [Journal Article]

Subjects: Activities of Daily Living; Cognitive Processes; Intervention; Schizophrenia; Transcranial Magnetic Stimulation; Adulthood (18 yrs & older); Young Adulthood (18-29 yrs); Thirties (30-39 yrs); Middle Age (40-64 yrs); Aged (65 yrs & older)

Effects of transcranial direct current stimulation on the auditory mismatch negativity response and working memory performance in schizophrenia: A pilot study.

Academic Journal

Impey, Danielle; Baddeley, Ashley; Nelson, Renee; Labelle, Alain; Knott, Verner; Journal of Neural Transmission, Vol 124(11), Nov, 2017 pp. 1489-1501. Publisher: Springer; [Journal Article]

Subjects: Electrical Stimulation; Schizophrenia; Short Term Memory; Mismatch Negativity; Transcranial Direct Current Stimulation; Adulthood (18 yrs & older); Young Adulthood (18-29 yrs); Thirties (30-39 yrs); Middle Age (40-64 yrs); Male; Female

Possible facilitative effects of repeated anodal transcranial direct current stimulation on functional outcome 1 month later in schizophrenia: An open trial. Open Access

Academic Journal

Narita, Zui; Inagawa, Takuma; Sueyoshi, Kazuki; Lin, Crystal; Sumiyoshi, Tomiki; Frontiers in Psychiatry, Vol 8, Sep 29, 2017 ArtID: 184. Publisher: Frontiers Media S.A.; [Journal Article]

Subjects: Activities of Daily Living; Brain Stimulation; Schizophrenia; Transcranial Magnetic Stimulation; Transcranial Direct Current Stimulation; Adulthood (18 yrs & older); Male; Female

Enhancing neuroplasticity to augment cognitive remediation in schizophrenia. Open Access

Academic Journal

Jahshan, Carol; Rassovsky, Yuri; Green, Michael F.; Frontiers in Psychiatry, Vol 8, Sep 27, 2017 ArtID: 191. Publisher: Frontiers Media S.A.; [Journal Article]

Subjects: Neural Plasticity; Schizophrenia; Brain Training; Neuromodulation; Transcranial Direct Current Stimulation

Stimulating thought: A functional MRI study of transcranial direct current stimulation in schizophrenia.

Academic Journal

Orlov, Natasza D.; O'Daly, Owen; Tracy, Derek K.; Daniju, Yusuf; Hodsoll, John; Valdearenas, Lorena; Rothwell, John; Shergill, Sukhi S.; Brain: A Journal of Neurology, Vol 140(9), Sep, 2017 pp. 2490-2497. Publisher: Oxford University Press; [Journal Article]

Subjects: Schizophrenia; Short Term Memory; Executive Function; Diffusion Tensor Imaging; Transcranial Direct Current Stimulation; Adulthood (18 yrs & older); Male; Female

Can repetitive transcranial magnetic stimulation improve neurocognition in schizophrenia when combined with cognitive remediation?

Academic Journal

Currie, Ariel; Nelson, Brent; Schizophrenia Research, Vol 183, May, 2017 pp. 161-162. Publisher: Elsevier Science; [Comment/Reply]

Subjects: Cognitive Mediation; Schizophrenia; Short Term Memory; Brain Training; Neuromodulation

Stimulating cognition in schizophrenia: A controlled pilot study of the effects of prefrontal transcranial direct current stimulation upon memory and learning.

Academic Journal

Orlov, Natasza D.; Tracy, Derek K.; Joyce, Daniel; Patel, Shinal; Rodzinka-Pasko, Joanna; Dolan, Hayley; Hodsoll, John; Collier, Tracy; Rothwell, John; Shergill, Sukhwinder S.; Brain Stimulation, Vol 10(3), May-Jun, 2017 pp. 560-566. Publisher: Elsevier Science; [Journal Article]

Subjects: Memory; Schizophrenia; Transcranial Magnetic Stimulation; Transcranial Direct Current Stimulation; Adulthood (18 yrs & older); Male; Female

'Does a combination of virtual reality, neuromodulation and neuroimaging provide a comprehensive platform for neurorehabilitation?—A narrative review of the literature':

Corrigendum. Open Access

Academic Journal

Teo, Wei-Peng; Muthalib, Makii; Yamin, Sami; Hendy, Ashlee M.; Bramstedt, Kelly; Kotsopoulos, Eleftheria; Perrey, Stephane; Ayaz, Hasan; Frontiers in Human Neuroscience, Vol 11, Feb 3, 2017 ArtID: 53. Publisher: Frontiers Media S.A.; [Erratum/Correction]

Subjects: Neuroimaging; Virtual Reality; Neurorehabilitation; Neuromodulation

Transcranial direct current stimulation over the dorsolateral prefrontal cortex in schizophrenia: A quantitative review of cognitive outcomes. Open Access

Academic Journal

Mervis, Joshua E.; Capizzi, Riley J.; Boroda, Elias; MacDonald, Angus W. III; Frontiers in Human Neuroscience, Vol 11, Feb 2, 2017 ArtID: 44. Publisher: Frontiers Media S.A.; [Journal Article]

Subjects: Prefrontal Cortex; Schizophrenia; Transcranial Magnetic Stimulation; Dorsolateral Prefrontal Cortex; Transcranial Direct Current Stimulation

Preliminary investigation of the effects of  $\gamma$ -tACS on working memory in schizophrenia.

Academic Journal

Hoy, Kate E.; Whitty, Dean; Bailey, Neil; Fitzgerald, Paul B.; Journal of Neural Transmission, Vol 123(10), Oct, 2016 pp. 1205-1212. Publisher: Springer; [Journal Article]

Subjects: Schizophrenia; Short Term Memory; Adulthood (18 yrs & older); Male; Female

Prefrontal transcranial direct current stimulation for treatment of schizophrenia with predominant negative symptoms: A double-blind, sham-controlled proof-of-concept study. Academic Journal

Palm, Ulrich; Keeser, Daniel; Hasan, Alkomiet; Kupka, Michael J.; Blautzik, Janusch; Sarubin, Nina; Kaymakanova, Filipa; Unger, Ina; Falkai, Peter; Meindl, Thomas; Ertl-Wagner, Birgit; Padberg, Frank; Schizophrenia Bulletin, Vol 42(5), Sep, 2016 pp. 1253-1261. Publisher: Oxford University Press; [Journal Article]

Subjects: Positive and Negative Symptoms; Schizophrenia; Transcranial Magnetic Stimulation; Transcranial Direct Current Stimulation; Adulthood (18 yrs & older); Young Adulthood (18-29 yrs); Thirties (30-39 yrs); Middle Age (40-64 yrs); Aged (65 yrs & older); Male; Female

Effect of transcranial direct current stimulation (tDCS) over the prefrontal cortex combined with cognitive training for treating schizophrenia: A sham-controlled randomized clinical trial. Open Access

Academic Journal

Shiozawa, Pedro; Gomes, July Silveira; Ducas, Daniella Valverde; Akiba, Henrique Teruo; Dias, Álvaro Machado; Trevizol, Alisson Paulino; Uchida, Ricardo R.; Orlov, Natasza; Cordeiro, Quirino; Trends in Psychiatry and Psychotherapy, Vol 38(3), Jul-Sep, 2016 pp. 175-177. Publisher: Associação de Psiquiatria do Rio Grande do Sul; [Journal Article]

Subjects: Prefrontal Cortex; Schizophrenia; Transcranial Magnetic Stimulation; Transcranial Direct Current Stimulation; Adulthood (18 yrs & older); Male; Female

Does a combination of virtual reality, neuromodulation and neuroimaging provide a comprehensive platform for neurorehabilitation? A narrative review of the literature. Open Access

Academic Journal

Teo, Wei-Peng; Muthalib, Makii; Yamin, Sami; Hendy, Ashlee M.; Bramstedt, Kelly; Kotsopoulos, Eleftheria; Perrey, Stephane; Ayaz, Hasan; Frontiers in Human Neuroscience, Vol 10, Jun 24, 2016 ArtID: 284. Publisher: Frontiers Media S.A.; [Journal Article]

Subjects: Neuroimaging; Virtual Reality; Neurorehabilitation; Neuromodulation

Transcranial stimulation of the dorsolateral prefrontal cortex prevents stress-induced working memory deficits.

Academic Journal

Bogdanov, Mario; Schwabe, Lars; *The Journal of Neuroscience*, Vol 36(4), Jan 27, 2016 pp. 1429-1437. Publisher: Society for Neuroscience; [Journal Article]

Subjects: Brain Stimulation; Prefrontal Cortex; Short Term Memory; Dorsolateral Prefrontal Cortex; Adulthood (18 yrs & older); Young Adulthood (18-29 yrs); Thirties (30-39 yrs); Male; Female

TDCS produces incremental gain when combined with working memory training in patients with schizophrenia: A proof of concept pilot study.

Academic Journal

Nienow, Tasha M.; Lim, Kelvin O.; MacDonald, Angus W. III; *Schizophrenia Research*, Vol 172(1-3), Jan, 2016 pp. 218-219. Publisher: Elsevier Science; [Letter]

Subjects: Cognitive Mediation; Schizophrenia; Short Term Memory; Brain Training; Neuromodulation; Adulthood (18 yrs & older)

Effects of transcranial direct current stimulation (tDCS) on cognition, symptoms, and smoking in schizophrenia: A randomized controlled study.

Academic Journal

Smith, Robert C.; Boules, Sylvia; Mattiuz, Sanelia; Youssef, Mary; Tobe, Russell H.; Sershen, Henry; Lajtha, Abel; Nolan, Karen; Amiaz, Revital; Davis, John M.; *Schizophrenia Research*, Vol 168(1-2), Oct, 2015 pp. 260-266. Publisher: Elsevier Science; [Journal Article]

Subjects: Cognition; Electrical Stimulation; Psychiatric Symptoms; Schizophrenia; Tobacco Smoking; Adulthood (18 yrs & older); Male; Female

Left dorsolateral prefrontal cortex anodal tDCS effects on negative symptoms in schizophrenia.

Academic Journal

Gomes, July Silveira; Shiozawa, Pedro; Dias, Álvaro Machado; Ducos, Daniella Valverde; Akiba, Henrique; Trevizol, Alisson Paulino; Bikson, Marom; Aboseria, Mohamed; Gadelha, Ary; de Lacerda, Aciolly Luiz Tavares; Cordeiro, Quirino; *Brain Stimulation*, Vol 8(5), Sep-Oct, 2015 pp. 989-991. Publisher: Elsevier Science; [Journal Article]

Subjects: Drug Therapy; Positive and Negative Symptoms; Prefrontal Cortex; Schizophrenia; Transcranial Magnetic Stimulation; Adulthood (18 yrs & older); Young Adulthood (18-29 yrs); Thirties (30-39 yrs); Male; Female

The effect of transcranial Direct Current Stimulation on gamma activity and working memory in schizophrenia.

Academic Journal

Hoy, Kate E.; Bailey, Neil W.; Arnold, Sara L.; Fitzgerald, Paul B.; *Psychiatry Research*, Vol 228(2), Aug 15, 2015 pp. 191-196. Publisher: Elsevier Science; [Journal Article]

Subjects: Prefrontal Cortex; Schizophrenia; Short Term Memory; Transcranial Magnetic Stimulation; Gamma Rhythm; Adulthood (18 yrs & older); Male; Female

Targeting negative symptoms in schizophrenia: Results from a proof-of-concept trial assessing prefrontal anodic tDCS protocol.

Academic Journal

Kurimori, Milton; Shiozawa, Pedro; Bikson, Marom; Aboseria, Mohamed; Cordeiro, Quirino; Schizophrenia Research, Vol 166(1-3), Aug, 2015 pp. 362-363. Publisher: Elsevier Science; [Letter]

Subjects: Positive and Negative Symptoms; Schizophrenia; Adulthood (18 yrs & older); Male; Female

Synchronizing theta oscillations with direct-current stimulation strengthens adaptive control in the human brain.

Academic Journal

Reinhart, Robert M. G.; Zhu, Julia; Park, Sohee; Woodman, Geoffrey F.; PNAS Proceedings of the National Academy of Sciences of the United States of America, Vol 112(30), Jul 28, 2015 pp. 9448-9453. Publisher: National Academy of Sciences; [Journal Article]

Subjects: Brain; Schizophrenia; Oscillatory Network; Transcranial Direct Current Stimulation

The effect of transcranial direct current stimulation on social cognition in schizophrenia: A preliminary study.

Academic Journal

Rassovsky, Yuri; Dunn, Walter; Wynn, Jonathan; Wu, Allan D.; Iacoboni, Marco; Hellemann, Gerhard; Green, Michael F.; Schizophrenia Research, Vol 165(2-3), Jul, 2015 pp. 171-174. Publisher: Elsevier Science; [Journal Article]

Subjects: Neurocognition; Schizophrenia; Social Cognition; Transcranial Magnetic Stimulation; Transcranial Direct Current Stimulation; Adulthood (18 yrs & older); Male; Female

Transcranial direct current stimulation to enhance cognitive remediation in schizophrenia.

Academic Journal

Tarur Padinjareveettil, Aparna Menon; Rogers, Jeffrey; Loo, Colleen; Martin, Donel; Brain Stimulation, Vol 8(2), Mar, 2015 pp. 305-309. Publisher: Elsevier Science; [Letter]

Subjects: Cognitive Rehabilitation; Intervention; Schizophrenia; Transcranial Magnetic Stimulation; Transcranial Direct Current Stimulation; Adulthood (18 yrs & older); Young Adulthood (18-29 yrs); Thirties (30-39 yrs); Male; Female

Smoking restores impaired LTD-like plasticity in schizophrenia: A transcranial direct current stimulation study.

Academic Journal

Strube, Wolfgang; Bunse, Tilmann; Nitsche, Michael A.; Wobrock, Thomas; Aborowa, Richard; Misewitsch, Kristina; Herrmann, Maximiliane; Falkai, Peter; Hasan, Alkomiet; Neuropsychopharmacology, Vol 40(4), Mar, 2015 pp. 822-830. Publisher: Nature Publishing Group; [Journal Article]

Subjects: Neurotransmission; Schizophrenia; Tobacco Smoking; Transcranial Direct Current Stimulation; Adulthood (18 yrs & older); Young Adulthood (18-29 yrs); Thirties (30-39 yrs); Middle Age (40-64 yrs); Male; Female

Transcranial direct current stimulation for memory enhancement: From clinical research to animal models. Open Access

Academic Journal

Bennabi, Djamilia; Pedron, Solène; Haffen, Emmanuel; Monnin, Julie; Peterschmitt, Yvan; Van Waes, Vincent; Frontiers in Systems Neuroscience, Vol 8, Sep 4, 2014 ArtID: 159. Publisher: Frontiers Media S.A.; [Journal Article]

Subjects: Animal Models; Electrical Brain Stimulation; Major Depression; Treatment Effectiveness Evaluation; Transcranial Direct Current Stimulation

An investigation into the effects of tDCS dose on cognitive performance over time in patients with schizophrenia.

Academic Journal

Hoy, Kate E.; Arnold, Sara L.; Emson, Melanie R. L.; Daskalakis, Zafiris J.; Fitzgerald, Paul B.; Schizophrenia Research, Vol 155(1-3), May, 2014 pp. 96-100. Publisher: Elsevier Science; [Journal Article]

Subjects: Brain Stimulation; Cognitive Ability; Electrical Stimulation; Schizophrenia; Transcranial Direct Current Stimulation; Adulthood (18 yrs & older); Male; Female

Can transcranial direct current stimulation (tDCS) alleviate symptoms and improve cognition in psychiatric disorders?

Academic Journal

Mondino, Marine; Bennabi, Djamilia; Poulet, Emmanuel; Galvao, Filipe; Brunelin, Jerome; Haffen, Emmanuel; The World Journal of Biological Psychiatry, Vol 15(4), May, 2014 pp. 261-275. Publisher: Informa Healthcare; [Journal Article]

Subjects: Mental Disorders; Psychopharmacology; Transcranial Magnetic Stimulation; Transcranial Direct Current Stimulation

Modulation of corollary discharge dysfunction in schizophrenia by tDCS: Preliminary evidence.

Academic Journal

Nawani, Hema; Bose, Anushree; Agarwal, Sri Mahavir; Shivakumar, Venkataram; Chhabra, Harleen; Subramaniam, Aditi; Kalmady, Sunil; Narayanaswamy, Janardhanan C.; Venkatasubramanian, Ganesan; Brain Stimulation, Vol 7(3), May, 2014 pp. 486-488. Publisher: Elsevier Science; [Letter]

Subjects: Hallucinations; Schizophrenia; Transcranial Magnetic Stimulation; Transcranial Direct Current Stimulation; Adulthood (18 yrs & older); Male; Female

Working memory improvement with non-invasive brain stimulation of the dorsolateral prefrontal cortex: A systematic review and meta-analysis.

Academic Journal

Brunoni, André Russowsky; Vanderhasselt, Marie-Anne; Brain and Cognition, Vol 86, Apr, 2014 pp. 1-9. Publisher: Elsevier Science; [Journal Article]

Subjects: Prefrontal Cortex; Reaction Time; Short Term Memory; Transcranial Magnetic Stimulation; Dorsolateral Prefrontal Cortex

Transcranial direct current stimulation in schizophrenia. Open Access

Academic Journal

Agarwal, Sri Mahavir; Shivakumar, Venkataram; Bose, Anushree; Subramaniam, Aditi; Nawani, Hema; Chhabra, Harleen; Kalmady, Sunil V.; Narayanaswamy, Janardhanan C.; Venkatasubramanian, Ganesan; Clinical Psychopharmacology and Neuroscience, Vol 11(3), Dec, 2013 pp. 118-125. Publisher: Korean College of Neuropsychopharmacology; [Journal Article]

Subjects: Auditory Hallucinations; Electrical Brain Stimulation; Neural Plasticity; Pathophysiology; Schizophrenia

Prefrontal transcranial direct current stimulation (tDCS) changes negative symptoms and functional connectivity MRI (fcMRI) in a single case of treatment-resistant schizophrenia.

Academic Journal

Palm, Ulrich; Keeser, Daniel; Blautzik, Janusch; Pogarell, Oliver; Ertl-Wagner, Birgit; Kupka, Michael Josef; Reiser, Maximilian; Padberg, Frank; Schizophrenia Research, Vol 150(2-3), Nov, 2013 pp. 583-585. Publisher: Elsevier Science; [Letter]

Subjects: Schizophrenia; Transcranial Magnetic Stimulation; Treatment Resistant Disorders; Transcranial Direct Current Stimulation; Adulthood (18 yrs & older); Young Adulthood (18-29 yrs); Male

Effects of transcranial direct current stimulation during sleep on memory performance in patients with schizophrenia.

Academic Journal

Göder, Robert; Baier, Paul Christian; Beith, Bente; Baecker, Cora; Seeck-Hirschner, Mareen; Junghanns, Klaus; Marshall, Lisa; Schizophrenia Research, Vol 144(1-3), Mar, 2013 pp. 153-154.

Publisher: Elsevier Science; [Letter]

Subjects: Memory; Schizophrenia; Sleep; Transcranial Magnetic Stimulation; Transcranial Direct Current Stimulation; Adulthood (18 yrs & older)

Neuroplasticity-based brain stimulation interventions in the study and treatment of schizophrenia. A review.

Academic Journal

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