

Supplementary Material

Article Title: Cognitive Effects of Electroconvulsive Therapy in Schizophrenia: A Systematic Review

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Cognitive Effects of Electroconvulsive Therapy in Schizophrenia: A Systematic Review

SUPPLEMENTARY MATERIAL

Supplementary Appendix 1: Database Search Strategies

I. MEDLINE Database (via Ovid)

#	Searches	Results
1	exp Schizophrenia/	112994
2	Schizophrenia*.tw,kf.	126079
3	schizophrenic disorder*.tw,kf.	1110
4	exp Electroconvulsive Therapy/	13999
5	electroconvulsive.tw,kf.	10541
6	electric convulsive.tw,kf.	103
7	electric shock.tw,kf.	3055
8	electroshock.tw,kf.	4355
9	ECT.tw,kf.	10122
10	1 or 2 or 3	155811
11	4 or 5 or 6 or 7 or 8 or 9	26998
12	10 and 11	2052
13	limit 12 to (english language and humans)	1435
14	limit 13 to yr="1985 -Current"	983

Date of search: September 22, 2022

II. PsycInfo Database (via Ovid)

#	Searches	Results
1	exp Schizophrenia/	96559
2	Schizophrenia*.tw.	116979
3	schizophrenic disorder*.tw.	1413
4	exp Electroconvulsive Shock Therapy/	7116
5	electroconvulsive.tw.	8594
6	electric convulsive.tw.	81
7	electric shock.tw.	3238
8	electroshock.tw.	1381
9	ECT.tw.	8182
10	1 or 2 or 3	129291
11	4 or 5 or 6 or 7 or 8 or 9	15090
12	10 and 11	1559
13	limit 12 to (human and english language)	1219
14	limit 13 to yr="1985 -Current"	1055

Date of search: September 22, 2022

III. Embase Database (via Ovid)

#	Searches	Results
1	exp schizophrenia/	194797
2	schizophrenia.tw,kw.	168388
3	schizophrenic disorder.tw,kw.	559
4	exp electroconvulsive therapy/	20246
5	electroconvulsive.tw,kw.	12479
6	electric convulsive.tw,kw.	42
7	electric shock.tw,kw.	3081
8	electroshock.tw,kw.	3850
9	ECT.tw,kw.	14296
10	1 or 2 or 3	222859
11	4 or 5 or 6 or 7 or 8 or 9	33177
12	10 and 11	3571
13	limit 12 to (human and english language)	2977
14	limit 13 to yr="1985 -Current"	2906

Date of search: September 22, 2022

IV. ClinicalTrials.gov

"schizophrenia" AND "electroconvulsive therapy"

Date of search: September 25, 2022

V. World Health ISRCTN registry

"schizophrenia" AND "electroconvulsive therapy"

Date of search: September 25, 2022

VI. European Union Clinical Trials Register

"schizophrenia" AND "electroconvulsive therapy"

Date of search: September 25, 2022

Supplementary Table 1: Cognitive Assessment Tools and Corresponding Domains

<u>First Author, Year</u>	<u>Measure</u>	<u>Domain(s)</u>
Bansod 2018 ¹	Wechsler Memory Scale	General memory, attention/ concentration, verbal memory, visual memory, delayed recall
	Autobiographical Memory Interview	Autobiographical memory
Chan 2019 ²	Montreal Cognitive Assessment	Global cognition
Chanpattana 2000 ³	Mini Mental State Exam	Global cognition
Chanpattana 2003 ⁴	Mini Mental State Exam	Global cognition
Davarinejad 2018 ⁵	Mini Mental State Exam	Global cognition
Jiang 2021 ⁶	Repeatable Battery for the Assessment of Neuropsychological Status	Immediate recall, visuospatial function, language, attention, delayed recall
Kim 2018 ⁷	Mini Mental State Exam	Global cognition
Li 2017 ⁸	Digit span - forward & backward	Working memory, attention
	Digit Symbol Coding	Processing speed
	Verbal fluency test	Verbal fluency
Liu 2022 ⁹	MATRICES Consensus Cognitive Battery	Processing speed, attention, working memory, verbal learning, visual learning, reasoning/problem solving, social cognition
Mishra 2022 ¹⁰	Montreal Cognitive Assessment	Global cognition
Pawelczyk 2015 ¹¹	Trail Making Test A	Attention, processing speed
	Trail Making Test B	Executive function
	Wisconsin Card Sorting Test	Executive function
Petrides 2015 ¹²	Mini Mental State Exam	Global cognition
	Rey Auditory Verbal Learning Test	Verbal memory
	Randt Memory Battery paired-word subset	Visual memory
	Randt Memory Battery story-recall subset	Verbal memory
	Letter-number span	Executive function
	Trail Making Test A	Attention, processing speed
	Trail Making Test B	Executive function
	Controlled Oral Word Association Test	Verbal fluency
	Continuous Performance Task	Attention
	Set-shifting	Executive function
Simsek 2015 ¹³	Frontal Assessment Battery	Executive function
Stryjer 2012 ¹⁴	Mini Mental State Exam	Global cognition
	Alzheimer's Disease Assessment Scale – Cognitive Subscale	Global cognition
Tan 2022 ¹⁵	Montreal Cognitive Assessment	Global cognition
Vukan-Cusa 2017 ¹⁶	California Verbal Learning Test	Verbal memory
	Benton Visual Retention Test	Visual memory
	Digit span	Working memory, attention
	Verbal fluency test	Verbal fluency
	Stroop test	Executive function, cognitive flexibility
Yang 2016 ¹⁷	MATRICES Consensus Cognitive Battery	Processing speed, attention, working memory, verbal memory, visual memory, reasoning/problem solving, social cognition

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