

Supplementary Material

Article Title: Compensatory Cognitive Training for Psychosis: Effects in a Randomized Controlled Trial

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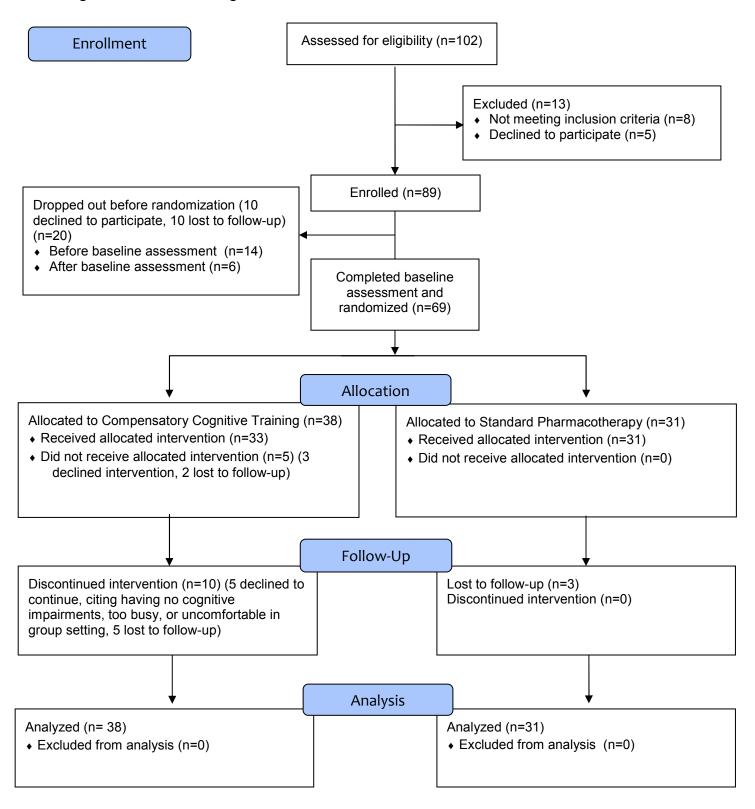
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eFigure 1. CONSORT Diagram



eTable 1. Hierarchical Linear Models

_	Verbal Learning (HVLT-R recall total)					Ex	Executive Functioning (WCST total)				Processing Speed (Digit Symbol total)				
	EE	SE	t	df	p-value	EE	SE	t	df	p-value	EE	SE	t	df	p-value
Intercept	22.97	1.07	21.42	103.82	< 0.001	40.91	2.03	20.14	89.53	< 0.001	53.43	2.53	21.16	78.15	< 0.001
Visit															
Post-treatment	1.28	1.11	1.15	95.09	0.251	-1.89	1.89	-1.00	89.55	0.319	-1.40	1.62	-0.86	89.54	0.391
3 Month Follow-up	0.83	1.08	0.77	94.32	0.441	1.06	1.82	0.58	89.12	0.563	-2.48	1.57	-1.58	89.33	0.118
Group (CCT)	-0.04	0.08	-0.54	103.82	0.590	0.02	0.15	0.16	89.53	0.876	-0.29	0.18	-1.62	78.15	0.109
Age	1.57	1.46	1.08	103.82	0.284	1.96	2.77	0.71	89.53	0.481	-2.00	3.45	-0.58	78.15	0.564
Age*Visit															
Post Treatment	0.00	0.09	-0.03	100.13	0.978	0.20	0.14	1.37	91.02	0.176	0.03	0.13	0.24	91.52	0.810
3 Month Follow-up	0.05	0.08	0.63	99.23	0.530	-0.11	0.14	-0.78	90.46	0.438	0.10	0.12	0.79	91.39	0.431
Group*Visit															
Post-treatment	-0.22	1.63	-0.14	99.16	0.892	3.87	2.71	1.42	91.75	0.158	-0.63	2.39	-0.26	91.20	0.792
3 Month Follow-up	1.44	1.57	0.91	98.61	0.363	3.04	2.62	1.16	91.48	0.249	1.21	2.31	0.52	91.10	0.602

_		ng Memor	y (LNS tot	al)	Verbal Fluency (COWAT total)					
	EE	SE	t	df	p-value	EE	SE	t	df	p-value
Intercept	8.31	0.49	16.89	82.70	< 0.001	41.86	2.00	20.89	79.12	< 0.001
Visit										
Post-treatment	-0.02	0.37	-0.06	90.21	0.951	0.63	1.42	0.44	89.19	0.657
3 Month Follow-up	0.00	0.36	0.00	89.90	0.998	-0.65	1.38	-0.47	88.92	0.636
Group (CCT)	0.03	0.03	0.93	82.70	0.353	-0.09	0.14	-0.60	79.12	0.549
Age	0.08	0.67	0.11	82.70	0.910	-0.72	2.74	-0.26	79.12	0.793
Age*Visit										
Post Treatment	-0.01	0.03	-0.43	92.93	0.667	-0.13	0.11	-1.13	91.56	0.262
3 Month Follow-up	-0.04	0.03	-1.48	92.69	0.143	0.09	0.11	0.84	91.36	0.404
Group*Visit										
Post-treatment	-0.19	0.54	-0.35	92.46	0.726	0.07	2.10	0.03	91.13	0.974
3 Month Follow-up	-0.04	0.53	-0.07	92.30	0.946	1.06	2.03	0.52	90.99	0.601

_	Positive Symptom Severity (PANSS)				Depressive Symptoms (HAM-D)				Social Skills Performance (SSPA)						
	EE	SE	t	df	p-value	EE	SE	t	df	p-value	EE	SE	t	df	p-value
Intercept	17.28	1.12	15.43	95.55	< 0.001	11.50	1.29	8.90	87.54	< 0.001	31.04	1.18	26.35	101.44	< 0.001
Visit															
Post-treatment	-0.87	1.07	-0.81	91.62	0.418	-0.99	1.14	-0.86	84.67	0.390	-0.52	1.19	-0.44	95.00	0.664
3 Month Follow-up	0.19	1.04	0.18	91.00	0.854	1.42	1.12	1.27	84.33	0.209	-0.90	1.14	-0.78	94.05	0.435

Group (CCT)	-0.05	0.08	-0.62	95.55	0.535	-0.03	0.09	-0.31	85.53	0.755	0.04	0.08	0.43	101.44	0.667
Age	-1.12	1.53	-0.73	95.55	0.465	0.45	1.74	0.26	86.64	0.799	0.28	1.61	0.18	101.44	0.860
Age*Visit															
Post Treatment	0.04	0.08	0.50	95.91	0.616	-0.01	0.09	-0.10	87.92	0.920	-0.03	0.09	-0.38	99.35	0.705
3 Month Follow-up	-0.04	0.08	-0.56	95.38	0.580	-0.16	0.08	-1.86	87.54	0.067	-0.02	0.09	-0.24	98.59	0.813
Group*Visit															
Post-treatment	-0.27	1.57	-0.17	95.13	0.862	-0.48	1.66	-0.29	87.45	0.775	0.50	1.73	0.29	98.56	0.774
3 Month Follow-up	-1.55	1.54	-1.01	94.90	0.316	-1.71	1.65	-1.03	87.39	0.305	0.87	1.67	0.52	98.01	0.604

_		CPSA Cognitive Problems						CPSA Cognitive Strategies					
	EE	SE	t	df	p-value	EE	SE	t	df	p-value			
Intercept	0.93	0.09	10.79	83.20	< 0.001	1.44	0.09	16.39	102.56	< 0.001			
Visit													
Post-treatment	-0.05	0.07	-0.70	85.99	0.487	-0.02	0.09	-0.19	92.99	0.849			
3 Month Follow-up	-0.10	0.07	-1.48	86.27	0.143	-0.01	0.09	-0.12	93.21	0.905			
Group (CCT)	0.01	0.01	1.13	81.97	0.261	0.00	0.01	-0.56	100.97	0.579			
Age	0.22	0.12	1.89	82.43	0.063	-0.14	0.12	-1.14	101.57	0.257			
Age*Visit													
Post Treatment	0.00	0.01	0.60	88.85	0.547	0.01	0.01	1.39	97.59	0.168			
3 Month Follow-up	0.00	0.00	0.86	88.68	0.390	0.00	0.01	0.41	96.99	0.684			
Group*Visit													
Post-treatment	-0.24	0.10	-2.37	88.46	0.020	0.47	0.13	3.65	96.91	0.000			
3 Month Follow-up	-0.11	0.10	-1.12	88.54	0.268	0.40	0.12	3.23	96.79	0.002			

Note. Significant findings are indicated in bold font. CCT = Compensatory Cognitive Training; COWAT = Controlled Oral Word Association Test; CPSA = Cognitive Problems and Strategies Assessment; EE = Effect Estimate; HAM-D = Hamilton Depression Rating Scale; HVLT-R = Hopkins Verbal Learning Test-Revised; LNS = Letter-Number Sequencing; PANSS = Positive and Negative Syndrome Scale; SE = Standard Error; SSPA = Social Skills Performance Assessment; WCST = Wisconsin Card Sorting Test

eAppendix 1. Cognitive Problems and Strategies Assessment

Please read the subject item and record the response by placing a check in the appropriate box.

Say, "First I'm going to ask you about problems some people have with their thinking and memory. Tell me how frequently each one is a problem for you, using this scale." Show the subject the scale (detach the back page).

Problems With Thinking and Memory

Problems With Thinking and Memor		C (1)	O(1)	A1 (2)
	Rarely/ Never (0)	Sometimes (1)	Often (2)	Always (3)
1. I have difficulty remembering to do				
things that I have scheduled.				
2. I forget to go to doctor's				
appointments.				
3. I have difficulty remembering to take				
medications.				
4. I forget to do housework or chores.				
5. I have difficulty remembering to take				
a bath or shower.				
6. I forget whether I've taken my				
medication.				
7. I have trouble remembering events				
that are coming up in the next few				
weeks.				
8. I forget people's names.				
9. I have trouble remembering the				
names of my medications.				
10. I forget my medication dosages.				
11. I have difficulty memorizing things				
that I need to know.				
12. I forget details from conversations.				
13. I have problems with memory				
retrieval (I know the information is				
in my brain, but I just can't seem to				
get it out).				
14. I have trouble learning new				
information.				
15. I lose things like my keys, glasses, or				
wallet.				
16. If I have a lot of things to do, I have				
trouble knowing which thing to do				
first.				
17. My living space is a mess because I have trouble getting organized with				
my chores.				
18. I run out of medication because I				
have not planned ahead to get my				
medication.				
19. I have trouble staying focused during				
conversations.				
20. I get distracted by other things when				
I am talking with someone.				
21. I have trouble staying focused while				
I work on a task.				
22. I get distracted by other things when				
22. I get distracted by office fillings whell				

I am working on a project.		
23. When I have a conversation, I got off		
track instead of staying on the topic.		
24. When I don't understand what		
someone is saying, I just pretend		
that I do understand.		
25. I have trouble understanding what to		
do when someone gives me		
instructions.		
26. I have trouble solving problems.		
27. My thinking gets stuck in a rut.		
28. When I need to solve a problem, I try		
one solution, and if it doesn't work,		
I give up.		
29. There is only one way to solve a		
problem.		
30. If I'm solving a problem and my		
solution is not working, I keep		
trying the same strategy until it		
works.		

Say, "Now I'm going to ask you about strategies some people use to help with their thinking and memory. Tell me how frequently you use each one, using the same scale."

Memory and Thinking Strategies

Memory and Thinking Strategies	Rarely/ Never (0)	Sometimes (1)	Often (2)	Always (3)
	Rarely/ Never (0)	Sometimes (1)	Often (2)	Always (5)
1. I use a calendar regularly to schedule				
and remember appointments and				
activities.				
2. I check a calendar every day to see				
what I have scheduled that day.				
3. Once a week or so, I look at my				
calendar and make a plan for the				
week.				
4. I keep a written list of things I need				
to do.				
5. I keep a written list of appointments I				
need to go to.				
6. I remember to do certain things by				
pairing them up with other things				
that I do on a regular basis (eg,				
remember to clean out the				
refrigerator every time I come home				
with groceries).				
7. I remember where things are by				
putting them in the same place all				
the time.				
8. If I need to remember something, I				
write it down somewhere.				
9. I place reminders for myself where I				
am sure to see them.				
10. I remember things by creating				
visual pictures in my mind.				
11. I take notes on things I want to learn				
and remember.				
12. If I want to remember something I've				
just heard, I repeat it to myself over				
and over.				
13. I remember things by linking new				
information to information I already				
know.				
14. I use acronyms to remember things.				
15. I put things I have to remember into				
categories.				
16. I use rhymes to remember things.				
17. If I want to learn something, I study				
it over and over until I know it by				
heart.				+
18. I repeat back what I hear to make				
sure I've understood things people				
tell me.				
19. I make eye contact with someone				
who is talking to help me				
understand what is being said.				+
20. To stay focused, I talk to myself				
while I'm working on a task.				

21. If I don't understand something that	
someone says, I ask the person	
questions about it until I am sure I	
understand.	
22. I usually stick to a daily schedule.	
23. My living space is organized so there	
is a place for everything, and	
everything is in its place.	
24. I use brainstorming to help me solve	
problems.	
25. I use a problem-solving method to	
help me solve problems.	
26. When I am solving a problem, I talk	
myself through it, step by step.	
27. I test out my ideas to see if they are	
accurate.	
28. I test out ideas by gathering "pro"	
and "con" evidence.	
29. When I am working on something, I	
monitor myself to see how I'm	
doing.	
30. When I'm having trouble solving a	
problem, I switch to a different	
strategy.	