# STIMULUS HANDOUT FOR CAP QUESTIONS

## 2023 MOCK MCQ EXAM

NB: one or two of the tables or figures are not as sharp as would be ideal - best we could do with the source material.

Opening the Stimulus pdf in a browser (R-click and choose from 'open with') rather than in Adobe reader improves the clarity and still allows you to rotate the page to view any landscape-oriented tables or figures as necessary.

If printing, print from the Word docx version.

#### CAP Question 1 (20 marks)

### "Skills for pills": The dialectical-behavioural therapy skills training reduces polypharmacy in borderline personality disorder

Joaquim Soler, Elisabet Casellas-Pujol, et al, Acta Psychiatrica Scandinavica, Jan 2022

#### Abstract

Objective: Polypharmacy and overprescription of off-label medications are common in patients with borderline personality disorder (BPD). The aim of the present naturalistic study was to explore whether the skills training module of dialectical-behavioural therapy (DBT) can reduce polypharmacy in these patients in routine clinical practice.

Methods: Retrospective, observational study of 377 patients with a primary diagnosis of BPD consecutively admitted to the BPD outpatient unit from 2010 through 2020. All patients were invited to participate in the DBT skills training module (DBT-ST). DBT-ST participants (n = 182) were compared with a control group who did not participate in DBT-ST (n = 195). Pre-post intervention changes in medication load and use of antidepressants, benzodiazepines, mood stabilizers, and antipsychotics were evaluated.

Results: At baseline, most patients (84.4%) were taking at least one medication and 46.9% were on polypharmacy. Compared to controls, patients in the DBT-ST group presented a significant reduction in the number of medications (2.67–1.95 vs. 2.16–2.19; p < 0.001), medication load (4.25–3.05 vs. 3.45–3.48; p < 0.001), use of benzodiazepines (54.4%–27.5% vs. 40%–40.5%; p < 0.001), mood stabilizers (43.4%–33% vs. 36.4%–39.5%; p < 0.001), and antipsychotics (36.3%–29.1% vs. 34.4%–36.9%; p < 0.001). Conclusions: These findings suggest that patients with BPD can benefit from the DBT-ST module, which may reduce the medication load, particularly of sedatives. The results suggest that DBT-ST may be useful to treat overmedication in patients with BPD and could help to promote "deprescription" in clinical practice.

#### (Excerpt from Material and Methods:)

Data were retrospectively collected from 377 patients diagnosed with BPD and admitted to the outpatient BPD unit at the Department of Psychiatry at the *Hospital de la Santa Creu i Sant Pau...* Compared with general mental health center, the BPD Unit offers: reliable confirmation of BPD diagnosis with validated instruments, greater accessibility to the unit, emergency attention in crisis, higher frequency and duration of visits, therapeutic team with specific experience and sensitivity for BPD, family care, psychoeducation of disorder, general management and non- harmful strategies, and, finally, supervision of pharmacological treatment avoiding the excessive use of medication.

#### (Excerpt from Materials and Methods)

The DIB-R is an instrument designed to diagnose BPD and to assess the severity of the disorder within the last 2 years. The Spanish version has demonstrated good internal consistency (Cronbach's alpha, 0.89; sensitivity, 0.81; and specificity, 0.94).

#### (Excerpt from Psychotherapeutic intervention – Control group:)

Although these individuals did not receive any specific psychotherapeutic intervention for BPD compared with general mental health services, they valued the higher frequency of psychiatric visits, attention in crisis, family care, and greater experience and sensitivity in the management of BPD. These follow- up visits also include supervision of pharmacological treatment avoiding, if possible, the excessive use of medications, as recommended by all clinical guidelines. They also received non- harmful strategies based on the *Handbook of Good Psychiatric Management for Borderline Personality Disorder*.

Table 1

Variables	Total sample (377)	DBT-ST (182)	Control group (195)	χ²	t	p
				λ		
Age, mean (SD)	30.51 (8.5)	30.92 (8.0)	30.14 (9.0)			n. s
Females, n (%)	336 (89.1%)	168 (92.3%)	168 (86.2%)			n. s
Married/stable couple, $n$ (%)	140 (37.1%)	68 (37.4%)	72 (36.9%)			n. s
Employed, n (%)	138 (36.6%)	72 (39.6%)	66 (33.8%)			n. s
Comorbidities						
Axis I comorbidity	266 (70.6%)	133 (73.1%)	133 (68.2%)			n. s
Affective disorders	87 (23.1%)	47 (25.8%)	40 (20.5%)			
Anxiety disorders	54 (14.3%)	26 (14.3%)	28 (14.4%)			
Eating disorders	116 (30.8%)	61 (33.5%)	55 (28.2%)			
Substance use disorders	133 (35.3%)	62 (34.1%)	71 (36.4%)			
DIB-R total score, mean (SD)	7.24 (1.2)	7.46 (1.2)	7.05 (1.2)		-3.27	0.001
Pharmacological treatment						
Medications, mean (SD)	2.41 (1.7)	2.67 (1.7)	2.16 (1.7)		-2.00	0.003
0	59 (15.6%)	18 (9.9%)	41 (21.0%)			
1	67 (17.8%)	35 (19.2%)	32 (16.4%)			
2	74 (19.6%)	32 (17.6%)	42 (21.5%)			
3	85 (22.5%)	45 (24.7%)	40 (20.5%)			
4	48 (12.7%)	25 (13.7%)	23 (11.8%)			
≥5	44 (11.7%)	27 (14.8%)	17 (8.6%)			
Polypharmacy	177 (46.9%)	97 (53.3%)	80 (41%)	5.69		0.017
Antidepressants	271 (71.9%)	142 (78.0%)	129 (66.2%)	6.56		0.014
Benzodiazepines	177 (46.9%)	99 (54.4%)	78 (40.0%)	7.83		0.005
Mood stabilizers	150 (39.8%)	79 (43.4%)	71 (36.4%)			n. s
Antipsychotics	133 (35.3%)	66 (36.3%)	67 (34.4%)			n. s
Medication load, mean (SD)	3.83 (2.9)	4.25 (2.8)	3.45 (2.8)		-2.75	0.006
Sedation load, mean (SD)	2.24(2.1)	2.49 (2.1)	2.01 (2.0)		-2.28	0.023

Abbreviations: DIB-R, Revised Diagnostic Interview for Borderlines; n. s., not significant; SD, standard deviation.

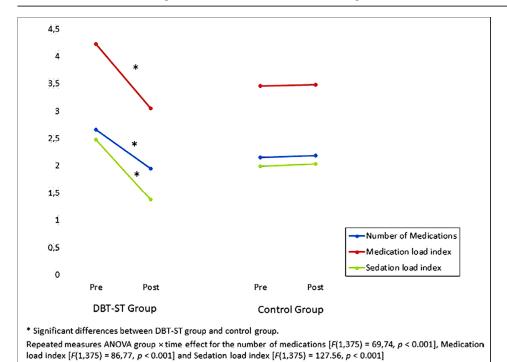
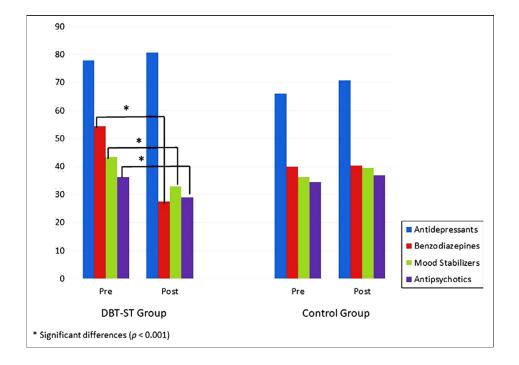


Figure 1
Differences between groups in prescription changes pre-post intervention:

**Figure 2**Pre-post intervention differences in the prescription of antidepressants, benzodiazepines, mood stabilizers, and antipsychotics:



# EMDR for Depression: A Meta-Analysis and Systematic Review

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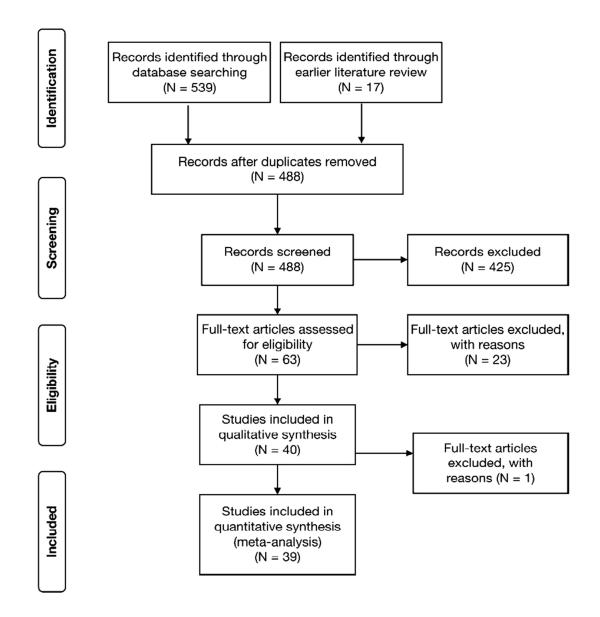
Journal of EMDR Practice and Research, Volume 15, Number 1, 2021

The literature on the efficacy of eye movement desensitization and reprocessing (EMDR) for treating depression is heterogeneous due to research design, quality issues, and trials methodology. The current meta-analysis seeks to examine EMDR for depression with the aim of answering the aforementioned limitations. Thirty-nine studies were included for analysis after a review of the relevant literature. Univariate meta-regressions were run to examine dose-response and the effect of moderating variables. Subanalysis for primary and secondary depression showed a large, significant, and heterogeneous effect-size estimates, where EMDR significantly improved symptoms of depression in contrast to all control types. At post hoc, data were reexamined and a significant and large, yet heterogeneous, effect-size estimate emerged between the EMDR and control arm after the removal of two outliers [Hedges' g = 0.70, 95% CI = 0.50–0.89, p-value < .01,  $I^2 = 70\%$ , K = 37]. This is the first meta-analysis examining for the effect of EMDR comparing to various control modalities on depression with dose-response. We found (a) that studies were balanced at onset in terms of depression severity, and (b) a large and significant effect of EMDR on depression at the end of trials. Additionally, the significance of the aggregate effect-size estimate at the end of trials was unchanged by the intake of psychotropic medications, reported demographic variables, or EMDR methodology.

(excerpt from Method)

Studies were excluded if: (a) literature review, letter to editor, conference abstract, thesis/dissertation abstract, meta-analysis (pooled data studies, individual patient meta-analysis), single case experimental design, case report, case series (<5 person), book chapters, and reporting study protocol; (b) non-English language papers; (c) no data on depression assessment endpoint was reported; and (d) hybrid psychotherapy treatment as a treatment arm was also excluded. Also, we have excluded studies if their validity was questionable, as confirmed with the original publishing journal.

CAP Question 2 contd. PRISMA Flow Diagram showing study selection for meta-analysis on EMDR for depression literature:



The kappa rate of agreement beween study coders (AAS and KL) was 88%, and in the event of a discrepancy, the conflict was resolved by discussion between the coders.

For all data analysis, we set the alpha level to .05 and used the Comprehensive Meta-Analysis software (Ver 2.0) (Borenstein et al, 2005).

Hedges's g and 95% CI		_    - 	<b>‡</b>	#	<b>+</b>	<b>+</b>	+	+		<b>+</b>	_ <b>‡</b>	- - -		+	+	•	<b>+</b>	<u></u>	<b>†</b>	+	<b>+</b>	- +	<u></u>	•		<b>T</b>	•	<b>+</b>	<b>T</b>	<b>+</b>	+	<b>+</b>	+	<u></u>	<u></u>	+	†	•	+	<b>+</b>	- - - -
Sample size	ENDR	37	71	=	93	29	0	7	25	E	13	9	2	11	92	2	77	ដ	0	13	82	22	11	3	11	93	8	2	E	22	9	8	•	ដ	13	81	22	7.	ដ	81	839
Samp	Control EMDR	33	17	01	a	20	13	7	136	31	=	~	1	11	91	91	21	6	6	2	18	12	9	33	01	30	7	7	33	23	∞	20	6	12	ន	19	12	56	12	53	868
	p-Value	0.000	0.037	0.173	0.695	0.637	0.008	0.893	0.133	0.000	0.472	0.257	0.000	0.759	0.005	0.249	0.011	0.043	0.008	0.852	0.00	0.197	0.002	0.013	0.712	0.000	0.143	0.002	0.000	0.000	0.000	0.429	0.835	0.122	0.552	0.000	0.007	0.108	0.029	0.548	0.000
study	Z-Value	5.948	2.090	1.363	0.392	-0.472	2.662	0.134	1.504	5.960	0.719	1.134	3.770	-0.307	3.149	1.152	2.558	2.022	2.655	-0.186	3.656	1.290	3.133	2.480	-0.370	8.904	1.464	3.155	9.175	3.735	3.526	0.792	0.208	1.545	0.595	4.533	2.674	1.606	2.187	-0.600	6.428
Statistics for each study	Upper	2.167	1.259	1.426	0.714	0.462	2.078	0.450	0.474	2352	1.068	1.800	3.513	0.554	1.915	1.121	1.424	1.774	2244	0.663	1.510	130	2.844	1.125	0.657	4.753	0.721	2.845	4.509	1.748	3.063	0.903	1.000	1.417	1.077	2.458	2.078	1.007	1.726	0.405	1.136
Statistic	Lower	1.093	0.040	-0.256	-0.476	-0.755	0.315	-0.393	-0.062	1.188	-0.495	-0.480	1.109	-0.760	0.446	-0.291	0.188	0.028	0.338	-0.802	0.456	-0.269	0.655	0.132	-0.962	3.038	-0.10\$	0.664	2.922	0.545	0.875	-0.384	-0.809	-0.168	-0.575	0.974	0.320	-0.100	0.094	-0.757	0.605
Ĕ	Hedges's 8	1.630	0.650	0.585	0.119	-0.147	1.197	0.029	0.206	1.770	0.287	0.660	2.311	-0.103	1.181	0.415	908.0	0.901	1.291	-0.069	0.983	0.517	1.749	0.628	-0.153	3.895	0.308	1.754	3.716	1.146	1.969	0.260	0.0%	0.625	0.251	1.716	1.199	0.453	0.910	-0.177	0.870
Time point		END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	END	
Outcome		Combined	BDI-II	II-IO8	HADS Depression	BDI-II	BDI-I	BDI-II	PHQ-9	BDI-I	BDI-I	BDI-I	BDI-II	BDI-II	Combined	Combined	BDI-II	HAM-D	BDI-I	HADS Depression	BDI-II	ure BDI-1	II-IQ8	BDI-I	Combined	BDI-I	HADS Depression	HDRS	BDI-II	Combined	BDI-I	BDI-1	₽нQ-9	PHQ-9	PRF-Depression	HADS-M Depression	CES-D	BDI-II	Combined	BDI-II	
Comparison		Wair-list	Imaginal Prolonged Exposure Therapy	СВТ	Relaxation therapy	Treatment as usual	Combined	Combined	Combined	Dubxetine	Combined	Combined	Wait-list	Combined	Treatment as usual	Treatment as usual	СВТ	Wait-list	Prolonged Exposure	EFT (Emotion Freedom Technique)	Wait-list	Stress Inoculation Training with Prolonged Exposure BDI-I	Wait-list	Standard Care	Trauma focused-CBT	No intervention	Brief Eclectic Therapy	Treatment as usual	CBT+ADM	Combined	Wait-list	Combined	Wait-list (delayed treatment)	Wait-list (delayed treatment)	Combined	Standard medical care	Combined	Combined	Combined	Wait-list	
Model Study name		Acarturk et al.	Arabia, Manca & Solomon	Capezzani, Ostacoli et al.	Carletto, Borghi, et al.	Carletto, Oliva, et al.	Carlson, Chemtob et al.	de Bont et al.	Deisenhofer et al.	Demirci et al.	Desily et al	Edmond & Rubin	Gauhar	Graca et al.	Hase et al.	Hase, Plagge, et al.	Hofmann et al. (Hase, Ostacoli) CBT	Hogberg et al.	Ironson	Karatrias et al	Kohler et al.	Lee et al.	Lehnung et al.	Marcus, Marquis & Sakai	Minelli, Zampieri et al	Moghadam et al.	Nijdam et al	Novo et al.	Ostacoli et al.	Power et al.	Rothbaum	Rothbaum, Astin & Marsteller	Shapiro & Laub	Shapiro, Laub & Rosenblat	Silver, Brooks & Obenchain	Szpringer et al.	Tarquinio et al.	van der Kolk et al.	Vaughan et al	Yurtsover et al.	Random

Forest plot showing studies (K = 39) with omnibus effect-size estimate at the endpoint (follow-up not included). Figure 2.

(excerpt from Results of Data Analysis)

When reviewing for heterogeneity, we removed the studies by Ostacoli et al. (2018) and Moghadam et al. (2015)

(excerpt from Limitations)

Another possible limitation is that we did not examine, either categorically or otherwise, for the effect of depression severity (e.g., treatment resistant), or personality factors related to depression (e.g., self-critical or socially focused depression). By the same token, we did not examine, per se, for clinical depression, as by scales' cut-off scores, or determine how many individuals out of those treated with EMDR actually improved versus those that did not. Furthermore, future studies are needed to link the EMDR treatment response to neurobiological underpinning.

**End of Stimulus handout**