

Outcome Predictors in Group Cognitive Behavioral-Therapy for Panic Disorder With and Without Agoraphobia

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Introduction

Cognitive behavioral-therapy (CBT) is one of the first-line recommended treatments¹ for Panic Disorder (PD) with or without agoraphobia (AG). Although CBT has been proven effective, on both group and individual formats, with higher effect sizes (ES=0.68) when compared to pharmacological (ES=0.47) or combined treatments (ES=0.56)², individual response rates are still heterogeneous, with some patients achieving long-lasting treatment responses and others remaining symptomatic or experiencing a return of symptoms at follow-up³. Identifying pre-treatment variables which might act as predictors of final CBT response could allow for tailored treatment decisions improving nonresponse rates. On the basis of the existing literature⁴, that up to date has reported mixed results, it is our aim to determine if the age of onset of PD, age of diagnosis, symptom severity, agoraphobia presence, depressive symptomatology and fear reactivity during exposure, with anxiety sensitivity as outcome measure, will predict group CBT treatment outcome for PD with or without AG.

Material & Methods

Final sample consisted of 104 patients, 65.38% women and 34.62% men with a mean age of 36.95 years (SD = 8.88), recruited in the Anxiety Unit of the Hospital del Mar (Barcelona). All participants met DSM-IV-TR criteria for a primary diagnosis of panic disorder (89% with AG). Diagnosis were determined using the Spanish adaptation of the Mini-International neuropsychiatric interview (MINI) version 5.0⁵ and later confirmed with a semi-structured interview. All participants received ten, weekly, one-hour group CBT sessions that comprised presentation and initial evaluation, psychoeducation, interoceptive exposure and situational exposure. Group CBT followed an adapted treatment protocol (Fullana et al., unpublished data) based on the Barlow and Craske Manual for Panic Disorder⁶. Outcome variable was measured at post-treatment and at one and three months following group therapy ending, using the Anxiety Sensitivity Index (ASI-3) Spanish adaptation⁷. Predictor variables were assessed at baseline by the Spanish self-report version of the Panic Disorder Severity Scale (PDSS-SR)⁸ and the Beck Depression Inventory (BDI-II)⁹. Age of onset of PD, age of diagnosis and agoraphobia presence were established at initial evaluation and fear reactivity during exposure was evaluated during sessions 5 and 6 of group CBT.

Results

As appropriate to the variables characteristics, Student's t-test and Pearson correlation coefficients were used to determine significant relationships between predictor variables and the ASI-3, as outcome measure, at posttreatment, 1 and 3 months follow-up. As shown in [table 1](#), with the exception of BDI-II pretreatment scores ($r=0.183$, $p<0.01$), neither age of diagnosis, symptom severity, agoraphobia presence or fear reactivity during exposure correlated significantly with treatment outcome(i.e., the difference between pre and posttreatment ASI-3 scores). Furthermore none of the predictor variables have shown to be significant in relation to the differences between pretreatment and 1 and 3 months follow-up (FU) ASI-3 scores.

Table 1. Pearson bivariate correlation and Student's t-test between pretreatment predictor variables and posttreatment outcome variable

Continuous Variable	Total ASI-3 (Pretreatment)		Total ASI-3 (Posttreatment)		Total ASI-3 (Pre - Posttreatment)		Total ASI-3 (Pretreatment - 1 month follow-up)		Total ASI-3 (Pretreatment - 3 months follow-up)					
	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>				
Age of Onset of Panic Disorder/Agoraphobia	0.073	0.380	0.015	0.874	0.079	0.396	0.055	0.566	0.017	0.864				
Age of Diagnosis	0.060	0.477	-0.007	0.942	0.093	0.326	0.021	0.833	-0.016	0.878				
PDSS-SR	0.356**	0.000	0.0296**	0.001	0.091	0.320	0.163	0.082	0.072	0.465				
BDI-II	0.522**	0.000	0.374**	0.000	0.183*	0.043	0.145	0.123	0.107	0.280				
Fear Reactivity During Exposure	-	-	-0.152	0.126	-0.035	0.729	-0.065	0.531	-0.122	0.230				
Dichotomous variable	<i>M (SD)</i>	<i>t</i>	<i>p</i>	<i>M (SD)</i>	<i>t</i>	<i>p</i>	<i>M (SD)</i>	<i>t</i>	<i>p</i>	<i>M (SD)</i>	<i>t</i>	<i>p</i>		
AG presence		-2.098	0.038		-2.205	0.29		-0.311	0.757		-0.403	0.688		
Without	27.79 (18.12)			17.18 (12.48)			8.63 (11.26)			11.51 (11.17)			11.92 (12.91)	
With	35.94 (14.30)			26.46 (14.52)			9.30 (13.77)			12.84 (14.86)			13.56 (13.84)	

Total ASI3: Anxiety Sensivity Index; PDSS-SR: Panic Disorder Severity Scale - Self Report Form; BDI-II: Beck Depression Inventory; AG Presence: Agoraphobia presence M: Mean; SD: Standard Deviation
* $p < 0.01$; ** $p < 0.05$

Discussion & Conclusions

The present study reveals that regardless of age of onset of PD, age of diagnosis, anxiety sensitivity, symptom severity and agoraphobia presence there is a significant reduction of anxiety symptoms when comparing pretreatment, posttreatment, 1 and 3 months FU scores. Therefore, it can be concluded that group CBT treatment is effective. When analyzing outcome predictor variables only depressive symptomatology is found to have a positive relation with treatment efficacy. These findings suggest that patients with moderate depressive symptoms (as measured by the BDI-II) improve and benefit more from group CBT treatment for PD with or without AG. These results are consistent with some of the data reported in Porter and Chambless⁴ in their systematic review of predictors and moderators of improvement in CBT. What remains to be established is why depressive symptomatology is a significant predictor of group CBT or what mechanisms underlie this response. Perhaps it would be of interest to address future research onto the identification of self-related predictor variables, such as self-efficacy expectations and coping strategies, as well as to determine the factors underlying early treatment response.

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