

The 10-year Meta-analysis of Cognitive-Behavioral Group Therapy for Depressive Symptoms

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In the past decades, the effects of the individual cognitive-behavioral therapy on mild to moderate depression have been supported. With regards to the cognitive-behavioral group therapy (CBGT), a small amount of research has addressed the impacts of different group designs on its therapeutic effect. Moreover, only few meta-analysis studies have tried to integrate these results. However, no recent study has provided systematic information regarding the group characteristics of the CBGT for the past ten years. The purpose of this meta-analysis is to find out the most effective group design of the CBGT to maximize its therapeutic effect for different populations and diagnoses.

One hundred and twenty-six studies included in this study were retrieved from Academic search premier, PsycINFO and Medline, during January 1997 to June 2007. These retrieved papers were screened via the six inclusion criteria by four independent reviewers. Finally, a total of 32 papers were selected in this study, but only half of them had sufficient data to compute the effect size. Two different types of effect sizes — d and eta squared values — were used to compare the magnitudes of the treatment effects across studies. The mean standardized effect size d for 11 selected studies was -0.68 , with high heterogeneity. Due to high heterogeneity among these studies, subgroup analyses were used to determine a possible moderator which could put these studies into homogenous groups. Subgroup analyses indicated a stronger effect for the child and adolescent group than the adult group. Also, providing a treatment manual for group members seemed to be an important characteristic of the group design to increase the effect of the CBGT.

Five studies with more complex designs were compared by the magnitudes of their eta squared values. Moderate to large eta squared values for the time main effect indicated a significant improvement of participants' depression symptoms after the CBGT treatment. A small and a large eta squared values for the group main effect suggested a significant but unstable CBGT group effect on depression when comparing with the control group. Moderate eta squared values for the time-group interaction effect implied a possible time-group influence when explaining the CBGT treatment effect.

Furthermore, all selected studies in this study are journal articles, which could lead to overestimate its effect size. The publication bias of this study was evaluated via the funnel plot and the fail-safe N . The result of the funnel plot and the fail-safe N examination of this study suggested a positive publication bias that was not stronger enough to overrule the significant treatment effect of this study.

Due to the diversity of the CBGT studies in the past ten years, the present study was unable to determine key moderators of the group designs to maximize the CBGT treatment effect. More research is needed to ascertain the characteristics of group design to reach the best effect for different populations and diagnoses.

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