Abstract:

OBJECTIVES: To identify relevant changes in process variables that are associated with outcome following an exercise and a multidisciplinary secondary prevention program for low back pain. METHODS: Data from a randomized controlled clinical trial to examine the effectiveness of an exercise and a multidisciplinary prevention program were analyzed using multiple regression analyses. The specific goal was to examine the amount of variance in changes in "interference" postintervention that could be explained by prechanges in physical and psychologic parameters, and to determine if there are interactions between physical/psychologic parameters and the program type. RESULTS: One hundred sixty-two (89%) participants were included in the regression analyses. Reductions of interference at postmeasurement were explained best by reductions of pain intensity and catastrophizing in the multidisciplinary and the exercise prevention program. No significant interaction between the changes in process variables and the program type was found. The final model could explain 68.7% of variance. CONCLUSIONS: Owing to methodologic limitations, strong conclusions cannot be drawn from this study. The findings suggest that treatment success in exercise and multidisciplinary interventions might be influenced by the same change factors, namely changes in pain and
psychologic factors. The results raise the question of whether the mechanism through which exercise works, is improve in physical variables, or rather a change in psychologic attributes, in that people correct their irrational cognitions by making experiences that differ from their expectations. If these findings can be confirmed in longitudinal studies with more measurement points, they would have implications for treatment refinement.