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Effects of an outpatient sport therapeutic program for patients with eating disorders (project no. 37-14)

Applicants / Authors

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Objective

Unhealthy attitudes towards sport and problematic exercise behavior in eating disorders (ED) are common and associated with poorer treatment outcomes and higher relapse rates. So far, only few specific interventions have been developed, which address this problem area.

The aim of the project was to test the efficacy of the Freiburg sport therapy program for patients with eating disorders (ED). The program was designed as a supplement to outpatient psychotherapy and intended to change pathological attitudes towards exercise and unhealthy exercise behavior.

An add-on-project aimed to investigate correlations between physical activity and emotional processes as well as dysfunctional cognitions (body dissatisfaction, drive for thinness) in real-life situations.

Method

Adult outpatients with ED and unhealthy exercising were randomized either to the three month sport therapy program or a waiting list control group. Patients were assessed when starting the program, at the end of the intervention and at a 6 month follow up. Main outcome criterion was a reduction in unhealthy exercising as measured with the Commitment to Exercise Scale (CES, total score). Secondary outcomes comprised eating pathology (Eating Disorder Examination Questionnaire, EDE-Q), different dimensions of unhealthy exercise (Compulsive Exercise Test, CET subscales) and exercise quantity (accelerometer).

For the add-on project we used methods of ambulatory assessment (cooperation with the Department of Sports Sciences and Sports Psychology of the Karlsruhe Institute of Technology). Everyday data from 29 ED patients and 35 healthy controls was collected using smartphones and accelerometers over a period of 7 days.

Results

Recruitment for the RCT was challenging. 15 patients were randomized to the sport therapy program and 11 were randomized to the waiting list control condition. There was no statistical difference between groups according to the main outcome criterion after three months. However, patients of the sport therapy intervention group showed a significantly stronger reduction in avoidance and rule driven behavior (CET subscale) when compared to controls. Improvements were maintained at follow up.

The add-on study showed that in ED patients, an increase in negative mood preceded episodes of exercise. As a result, exercise had positive, but temporary effects on mood, body dissatisfaction and drive for thinness. Effects on body dissatisfaction and drive for thinness were specific for ED.

Conclusion

Results point to the effectiveness of the sport therapy program, but have to be interpreted with caution and verified in further studies.

Findings of the add-on-project confirmed findings from cross-sectional studies suggesting that exercise in ED is often used for affect regulation. The positive effects of exercise might reinforce exercise behavior and increase the risk of unhealthy exercising. However, the findings also support the use of supervised exercise in the treatment of ED.

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Reichert M / Schlegel S, Jagau F, Timm I, Wieland L, Ebner-Priemer U, Hartmann A, Zeeck A. Mood and dysfunctional cognitions constitute within-subject antecedents and consequences of exercise in eating disorders [Letter]. Psychother Psychosom, 2019 Nov 8:13. doi: 10.1159/000504061

Zeeck A / Schlegel S, Jagau F, Lahmann C, Hartmann A. The Freiburg Sport Therapy Program for Eating Disorders: Results of a randomized controlled trial (submitted)

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