ABSTRACT SUBMISSION BASO FREE COMMUNICATIONS FEBRUARY 2019

Adherence and Treatment Barriers in an Executive Function Intervention for Childhood Obesity

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Childhood obesity is a serious condition with high prevalence rates and lifelong consequences. Evidence-based intervention is recommended, with Multidisciplinary Obesity Treatments (MOT) as a golden standard. However, long-term outcomes still can be improved. Two pathways are promising, but never have been properly combined: intervening at the level self-control as an underlying mechanism of behaviour change by adding an e-health Executive Function (EF) training to MOT, and investigating adherence as an ecologically valid measurement of effectivity. The aim of this study was to analyze adherence of EF-training, and exploring the contribution of home context barriers as conceptualized in the Barriers to Treatment Model (Kazdin et al. 1997). We investigated a sample of 33 youngsters between 14 and 18 (M_age= 16), suffering from severe obesity (M_ABMI= 201%). While in an inpatient program (Zeepreventorium vzw), they participated in an additional e-health EF-training both during (intensive phase) and after (booster phase) MOT. Significant differences in barriers between a high and low adherence group were expected on the Barriers to Treatment Participation Scale (BTPS), which was extended with a fifth subscale to cover specific technology requirement issues. Results showed that leaving MOT was the critical point of drop-out. Although no significant group differences were found in perceived barriers, there were several interesting findings. First, the low adherence group consistently had a higher weight status, and small to medium effect sizes suggest that they lost less weight over time. Second, in-depth analysis of the BTPS-items showed that the low adherence group more frequently experienced practical obstacles and issues referring to training in the home context. Leaving the inpatient treatment center and a high weight status can be considered additional risk factors for dropping out of obesity EF-training. It appears that youngsters who need intervention the most – those with the highest weight – experience the most difficulties, for example because of the decrease in monitoring and supervision. Adherence remains a difficult challenge in the treatment of obesity, even when interceding in the underlying mechanisms via e-health as such an innovative intervention modality.

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