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Dealing With Intrusive Thoughts in OCD - a Comparison of Detached Mindfulness and Cognitive Restructuring

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Data Analysis
Data were analyzed using the $R$ package *ez* (Lawrence, 2016) and *IBM SPSS Statistics (SPSS) 25.0*. Comparability of groups at baseline was analyzed by calculating independent *t*-tests for continuous variables and $\chi^2$-test for categorical variables. In order to evaluate the efficacy of treatments, a 2x2x2 mixed ANOVA was run with the within-subjects factor *time*, referring to the various assessment points, and the between-subjects factors *waitlist* (WL/NWL) and *treatment condition* (CT/MCT). In contrast to the calculation of effect sizes described below this ANOVA excluded the Post assessment data from subjects in the waitlist group towards a conservative testing procedure, so that the definition of time points differed between WL and NWL groups: In both groups, $T1$ referred to Pre1 data, however, $T2$ referred to Pre2 data in the WL group and to Post data in the NWL, thus separating effects of *time* and *treatment* separately. The use of the $R$ package *ez* involved the computation of the generalized eta squared statistic ($\eta_G^2$) in order to display the amount of explained variance (Olejnik & Algina, 2003).

The calculation of effect sizes (Cohen’s $d$) was based on the whole data set including the Post data from WL subjects, which was based on the a priori assumption of *time* not exhibiting a main effect. Due to this assumption, Pre2 data were not used in the calculation of effect sizes. Three effect sizes (Pre1-Post, Post-FU, and Pre1-FU) were calculated for each treatment condition as follows, using pooled standard deviations ($SD_{Pre1}$: 3.385; $SD_{Post}$: 5.789) instead of separate standard deviations for CT and MCT ($x = \text{mean Y-BOCS score, } SD = \text{standard deviation}$): 

$$d_1 = \frac{x_{Pre1}-x_{Post}}{SD_{Pre1}}, \quad d_2 = \frac{x_{Post}-x_{FU}}{SD_{Post}}, \quad d_3 = \frac{x_{Pre1}-x_{FU}}{SD_{Pre1}}.$$ 

Moreover, in order to display the *amount* of improvement, clinically significant change was assessed as proposed by Jacobson & Truax (1991). It was defined by a combination of two criteria: (1) *reliable improvement*: $RC = \frac{x_2-x_1}{S_{diff}}$, with $x_1$ representing a person’s Y-BOCS score at Pre1 assessment, $x_2$ referring to a person’s Y-BOCS score at Post
assessment, and $S_{\text{diff}}$ denoting being the standard error of difference scores (based on the internal consistency of the German version of the Y-BOCS ($r = .80$, ) as reported by Jacobsen, Kloss, Fricke, Hand, and Moritz (2003). Based on our calculations, a decrease of 5 points or more on the Y-BOCS indicated was used as an index of reliable improvement. (2)

recovery criterion: $a = M_1 - 2*SD_1$, with $M_1$ representing the mean Y-BOCS score of the sample at Pre1 assessment and $SD_1$ referring to the corresponding standard deviation. A post assessment Y-BOCS score of $a = 17.9$ or less indicated recovery. A reliable change was presumed if participants displayed a post-assessment Y-BOCS score of 17.9 or less (recovery criterion) and a minimal Pre1-Post change of 5 -points on the Y-BOCS (reliable improvement criterion).