The association between worry, rumination, and metacognitive beliefs in female adolescents with anorexia nervosa.

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Background: a growing body of literature has emphasized the role of worry and rumination in eating disorders (EDs). According to the metacognitive model, worry and rumination are maintained by dysfunctional metacognitive beliefs. Although metacognitive beliefs have been investigated in adults with EDs, their role in adolescents with EDs remains underexplored. The present exploratory study aimed to examine the specific association among worry, rumination, and metacognitive beliefs and eating disorder symptomatology in adolescents with AN.

Methods: thirty Italian female adolescents (mean age ± SD: 15.387 ± 1.35 years, mean Body Mass Index (BMI): 16.34 ± 2.5 kg/m^2) completed a self-report survey composed of the Penn State Worry Questionnaire (PSWQ), the Ruminative Response Scale (RRS), the Metacognitions Questionnaire - 30 (MCQ-30), and the Eating Disorder Inventory - 3 (EDI-3).

Results: thus, Model 1, including RRS and PSWQ, was significant ($F = 17.5$, $p < 0.001$). The final model explained 58% of variance ($R^2 = 0.578$; Cohen's $f^2 = 1.37$).

Conclusion: rumination was significantly associated with eating disorder symptomatology. Although worry showed strong positive associations with eating disorder symptomatology at the correlational level, it did not maintain an independent role once rumination was included in the regression model. The final model showed a very large effect size (Cohen's $f^2 = 1.37$), suggesting strong associations between predictors and eating disorder symptoms in the present sample. However, this estimate should be interpreted cautiously, given the limited sample size and the exploratory nature of the analysis. Contrary to our expectations, metacognitive beliefs did not significantly explain the variance of eating disorder symptomatology. This finding may reflect the more proximal role of RNT in explaining the variance in eating disorder symptomatology, or alternatively, the possibility that only specific metacognitive domains - rather than overall metacognitive functioning - are relevant in this population.