A Preliminary Empirical Investigation of the Affect Regulation Theory of Compulsive Exercise

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Background

- Although exercise is generally considered a health-promoting behavior, when performed in a compulsive manner, it can be harmful.
- Compulsive exercise is common in individuals with restrictive eating disorders (EDs), affecting up to 80% of individuals with anorexia nervosa.
- Prominent theoretical models propose that affect regulation is the main psychological reinforcer of compulsive exercise; however, experimental studies testing these models are lacking.
- The current study aims to descriptively map trajectories of positive and negative affect during an acute (30-minute) bout of exercise.
- The current study also aims to examine differences in compulsive exercise between individuals with EDs and healthy controls (HCs).

Methods

- Participants include 28 young women aged 14-22 years presenting with (n=10) and without (n=18) ED symptoms.
- Participants were interviewed using the Eating Disorder Examination (EDE) and self-reported their reasons for exercise engagement using the Compulsive Exercise Test (CET).
- Participants also completed the Physical Activity Affect Scale (PAAS), assessing their positive and negative affect before and after a 30-minute exercise bout.

Results

From before to after a 30-minute exercise bout, positive affect increased and negative affect decreased in both healthy controls and individuals with EDs, evidence of affective changes with exercise engagement.

Individuals with EDs, on average, had higher compulsive exercise scores, evident globally as well as across subscales.

Average Global CET Score

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<th>Healthy Controls (HC)</th>
<th>Individuals with EDs (ED)</th>
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<tbody>
<tr>
<td>Score</td>
<td>15.2</td>
<td>24.1</td>
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There is an urgent need to understand the role affect plays in compulsive exercise to improve treatment of EDs.