A short version of the Food Cravings Questionnaire – Trait: The FCQ-T-reduced

Background

Food craving refers to an intense desire to consume a specific food. One of the most often used instruments for the assessment of food cravings is the Food Cravings Questionnaire (FCQ), which consists of a trait (FCQ-T; 39 items) and state (FCQ-S; 15 items) version [1,2]. Scores on the FCQ-T have been found to be positively associated with eating disorder pathology, body mass index (BMI), low dieting success, restrained eating, attentional impulsivity, and increases in state food craving during cognitive tasks involving appealing food stimuli [3-4]. The current studies evaluated reliability and validity of a reduced version of the FCQ-T consisting of 15 items only (FCQ-T-r).

Method

Study 1 was a questionnaire study conducted online among students (N = 323, 84% female), which included the FCQ-T-r, the Perceived Self-Regulatory Success in Dieting Scale, and other questionnaires. Factor structure was examined with factor- and parallel analysis, internal consistency was evaluated with Cronbach’s alpha, and Pearson-correlations were calculated with BMI and dieting success as a preliminary indication for construct validity.

In study 2, female students (N = 70) performed a working memory task involving food and neutral pictures (Fig. 1). Participants completed the FCQ-S before and after the task, the FCQ-T-r, and other questionnaires. Associations between FCQ-T-r scores, current food deprivation, and current food craving were examined with linear regression analyses.

Results

Study 1 indicated a one-factor structure (Fig. 2) and high internal consistency of the FCQ-T-r (Tab. 1). Scores on the FCQ-T-r were positively correlated with BMI and negatively correlated with dieting success (Tab. 2). In study 2, participants reported higher state food craving after the task compared to before (t(69) = 3.21, p = .002). This increase was positively correlated with FCQ-T-r scores (Fig. 3).

Food deprivation positively predicted food craving before the task (β = .25, p = .04) while FCQ-T-r scores positively predicted food craving after the task (β = .30, p = .03). Thus, trait food craving was specifically associated with state food craving triggered by palatable food-cues, but not with state food craving related to plain hunger.

Similar to study 1, small-to-medium correlations were found with BMI and dieting success and, in addition, medium-to-large correlations with restrained eating, attentional impulsivity, and eating disorder pathology (Tab. 1).

Conclusion

Results indicate high internal consistency of the FCQ-T-r.

Replicating studies that used the long version, small-to-medium correlations with BMI and dieting success and medium-to-large correlations with restrained eating, attentional impulsivity, and eating disorder pathology could be found [1-4]. Finally, scores on the FCQ-T-r predicted cue-elicited food craving, providing further support of its validity.

The FCQ-T-r constitutes a succinct, valid and reliable self-report measure to efficiently assess experiences of food craving as a trait.

References


*Contact: adrian.meule@uni-wuerzburg.de