



Body Image-Related Cognitive Fusion and Disordered Eating Among Adolescents: Investigating the Role of Gender

Govind Panwar¹, Priyanshi Sirohi²

¹Ph.D. Scholar, Gurukula Kangri (Deemed to be University), Haridwar, Uttarakhand, 249404

²Student of Advanced Diploma in Child Guidance and Counseling, Gautam Buddha University, Greater Noida, 201312

Email: govindpanwar.in@gmail.com, Email: khushisirohi1@gmail.com

Abstract

During adolescence, a developmental stage typically marked by heightened concerns regarding appearance, body image-related cognitive fusion has become identified as a substantial psychological factor linked to disordered eating. This study examined the relationship among body image-related cognitive fusion, disordered eating, and gender in adolescents aged 12 to 18 years. A total of 168 participants (N = 168) completed standardized self-report measures of body image-related cognitive fusion and disordered eating attitude, along with a brief demographic form including gender. Using a correlational, cross-sectional design, the study tested four hypotheses: that cognitive fusion would be positively related to disordered eating, that gender would be related to cognitive fusion, that gender would be related to disordered eating, and that these three variables would form an interrelated pattern rather than independent associations. The bivariate correlation analyses statistically support H1 and H2 at .05 level, whereas H3 and H4 were not statistically significant, including the finding shows no statistically significant correlation between gender and disordered eating ($r = -.081, p > .05$). Body image-related cognitive fusion was statistically significant at level .05 and positively associated with disordered eating ($r = .194, p < .05$), Gender showed a weak negative association with body image-related cognitive fusion ($r = -.178, p < .05$), indicating higher cognitive fusion scores of males than females. Taken together, these outcomes contribute to the growing body of literature linking body image-related cognitive fusion to disordered eating attitudes, and underscore the importance of assessing these cognitive processes which are central to frameworks like Acceptance and Commitment Therapy to better understand eating-related difficulties among adolescents.



Keywords: *body image-related cognitive fusion, disordered eating, adolescents, gender, Acceptance and Commitment Therapy*

INTRODUCTION

Adolescence is widely recognized as a developmental period of heightened vulnerability to dissatisfaction and disordered eating, driven by rapid physical changes, increased social comparison, and growing sensitivity to peer and media appearance ideals. Within this context, researchers working from an Acceptance and Commitment Therapy (ACT) perspective have proposed that it is not simply the presence of negative body-related thoughts that drives eating difficulties, but the degree to which individuals become entangled with, or "fused" with, those thoughts, treating them as literal truths that demand attention and behavioral compliance rather than as passing mental events (Hayes, Strosahl, & Wilson, 2012).

A growing body of empirical work has linked body image-related cognitive fusion directly to disordered eating attitudes and behaviors. Ferreira, Palmeira, and Trindade (2014) modeled body image-related cognitive fusion as the pathway through which body dissatisfaction and unfavourable social comparisons translate into eating psychopathology, with their integrative model accounting for a substantial share of the variance in symptom severity, suggesting that fusion operates as a proximal mechanism rather than a distal correlate. In a related study, Trindade and Ferreira (2014) reported that body image-related cognitive fusion partially explained the effect that body dissatisfaction and social comparison had on eating psychopathology, again pointing to fusion as a process that channels broader risk factors into disordered eating symptoms. More recently, Scardera, Sacco, Di Sante, and Booij (2021) examined body image-related cognitive fusion alongside self-compassion and negative mood as related contributors to disordered eating, reinforcing fusion's role as a meaningful correlate of eating difficulties and pointing toward cognitive defusion as a plausible target for prevention and intervention efforts.

Alongside cognitive processes, gender has long been treated as a key demographic variable in the study of body image and eating disturbance. Traditionally, disordered eating research has focused disproportionately on adolescent girls and women, reflecting epidemiological patterns in which eating disorders are diagnosed more frequently among females. However, more recent research has emphasized that body dissatisfaction and disordered eating are not experienced exclusively by women, and that the underlying psychological pathways may differ by gender rather than being absent in males. MacNeill, Best, and Davis (2017) found that while personality traits such as neuroticism predicted body dissatisfaction in both male and female undergraduates, these same traits significantly predicted disordered eating scores only among women, with no comparable relationship emerging for men. Such findings suggest that gender may moderate not only the prevalence of disordered eating but also the cognitive and emotional processes, such as fusion with appearance-related thoughts, that underlie it.

Despite this growing interest, relatively little research has directly examined whether body image-related cognitive fusion itself differs by gender, or whether it relates to disordered eating similarly across male and female adolescents. Understanding whether gender is associated with



the intensity of cognitive fusion, and whether fusion relates to disordered eating differently for boys and girls, has direct implications for how clinicians tailor ACT-based interventions, which explicitly target cognitive fusion through defusion techniques, across gender groups (Hayes et al., 2012).

Given these gaps, the present study examined body image-related cognitive fusion, disordered eating attitudes, and gender in a sample of adolescents aged 12 to 18 years. Consistent with prior findings linking fusion to eating psychopathology (Ferreira et al., 2014; Scardera et al., 2021; Trindade & Ferreira, 2014), it was hypothesized that greater body image-related cognitive fusion would be associated with more disordered eating attitudes. Given evidence that body image processes can differ by gender (MacNeill et al., 2017), it was further hypothesized that gender would be related both to cognitive fusion and to disordered eating, and that cognitive fusion, disordered eating, and gender would together form an interrelated pattern of associations rather than a set of independent relationships. By jointly examining these three variables, the present study aimed to extend the literature on cognitive fusion as a transdiagnostic mechanism in adolescent eating difficulties and to clarify the role that gender plays within this process.

RESEARCH OBJECTIVES

- To examine the relationship between cognitive fusion and disordered eating attitudes.
- To examine the relationship between gender and cognitive fusion.
- To examine the relationship between gender and disordered eating attitudes and behaviors.
- To determine the relationship between cognitive fusion, disordered eating, and gender.

RESEARCH HYPOTHESES

- There will be a significant positive relationship between cognitive fusion and disordered eating.
- There will be a significant relationship between gender (male and female) and cognitive fusion.
- There will be a significant relationship between gender (male and female) and disordered eating.
- There will be a significant relationship between cognitive fusion, disordered eating, and gender.

METHODS

Sample

The study included two groups of participants drawn from the adolescent age range of 12–18 years, divided equally across two gender groups of 84 participants each, male (n=84) and female (n=84). The total sample consisted of 168 participants (N=168), who completed a self-report survey questionnaire assessing cognitive fusion and disordered eating attitude.

Variables

Three variables were examined in this study: body image-related cognitive fusion, disordered eating, and gender. Cognitive fusion and disordered eating were measured as continuous composite scores from standardized scales. Gender was a dichotomous variable.



Test And Tools Used

Cognitive Fusion Questionnaire: Cognitive fusion related to body image was assessed using the 10-item Cognitive Fusion Questionnaire–Body Image (CFQ-BI; Ferreira et al., 2015). This measure is an adapted version of the original Cognitive Fusion Questionnaire developed by Gillanders et al. (2014) and is designed to assess the extent to which individuals become entangled with body-related thoughts, such as thoughts about weight, shape, and appearance. It has demonstrated excellent internal consistency, with Cronbach's alpha values typically in the .95 to .96 range and McDonald's omega also reported at .95 to .96, indicating strong reliability. Test-retest findings suggest adequate temporal stability, with coefficients generally falling between .75 and .84. Respondents rate each item according to how well it describes their experience, and the total score is obtained by summing the item responses. Higher scores indicate greater cognitive fusion with body image–related thoughts. The CFQ-BI has demonstrated good internal consistency and acceptable convergent validity with measures of body dissatisfaction and eating-related psychopathology.

Eating Attitudes Test–16 (EAT-16): Disordered eating attitudes were measured using the Eating Attitudes Test–16 (EAT-16), a shortened form of the original Eating Attitudes Test–26 (EAT-26) developed by Garner et al. (1982). The EAT-16 was derived and validated by Ocker et al. (2007) through confirmatory factor analysis, which supported a 16-item, four-factor structure. The four factors include dieting, self-perception of body shape, food preoccupation, and awareness of food contents. Responses are given on a six-point Likert scale ranging from Never (1) to Always (6), and scores are summed to obtain a total score. Higher scores reflect greater disordered eating attitudes. The scale has shown adequate reliability and validity in nonclinical samples.

Gender was recorded as a categorical demographic variable in the background information section of the survey and for statistical analyses, gender was coded as 0 = Male and 1 = Female.

ADMINISTRATION AND PROCEDURE

Testing took place in a well-lit, ventilated, and quiet room to minimize external distraction. Before administration, each participant completed an informed consent form and made sure for the maintenance of confidentiality; participants were told that their responses would remain anonymous and confidential and that the data were being collected solely for research purposes. The administrator established rapport with each participant before testing began. Instructions for the scale were read aloud, and participants were invited to ask questions, which were clarified before responding. The cognitive fusion questionnaire and Eating Attitudes Test–16 (EAT-16) was then administered, and responses were recorded and scored according to its standard protocol. Confidentiality of all responses was maintained throughout the study. Responses were screened and entered into IBM SPSS Statistics for analysis. Descriptive statistics (means and standard deviations) were computed for cognitive fusion, disordered eating, and gender. Bivariate Pearson correlation coefficients were then calculated to examine the relationships among the three variables. An alpha level of .05 was used to evaluate statistical significance, consistent with the two-tailed significance levels reported by SPSS.



RESULT AND INTERPRETATION

Prior to hypothesis testing, descriptive statistics were computed for all study variables.

Table 1

Descriptive Statistics for Study Variables

Variable	Mean	Standard Deviation	N
Cognitive Fusion (CFQ)	26.02	10.31	168
Disordered Eating (EAT)	8.02	6.81	168

Table 1. Across the 168 participants, cognitive fusion scores averaged 26.02 (SD = 10.31), and disordered eating scores averaged 8.02 (SD = 6.81). Both variables displayed a fairly wide spread of scores, as reflected in the standard deviations, indicating meaningful individual variability in fusion and eating-related attitudes within the sample.

Table 2

Correlations Among Cognitive Fusion, Disordered Eating, and Gender

	Cognitive Fusion	Disordered Eating	Gender
Cognitive Fusion	1	.194*	-.178*
Disordered Eating	.194*	1	-.081
Gender	-.178*	-.081	1

* $p < .05$ (2-tailed).

Table 2 showed that cognitive fusion was statistically significant at .05 level and positively related to disordered eating attitudes, $r(168) = .194$, $p < .05$; participants who scored higher on cognitive fusion also tended to report more disordered eating attitudes. Consistent with H2, a statistically significant relationship at the .05 level was observed between gender and cognitive fusion, $r(168) = -.178$, $p < .05$. This indicates that males reported significantly higher levels of cognitive fusion regarding body image than females. In support of H3, gender was not statistically significantly related to disordered eating, $r(168) = -.081$, $p > .05$.

H4 proposed that cognitive fusion, disordered eating, and gender would form an interrelated pattern of associations. Given that the relationship between cognitive fusion and disordered eating (H1) and the relationship between gender and cognitive fusion (H2) were statistically significant, but the relationship between gender and disordered eating (H3) was not, the hypothesis of a fully interrelated three-way pattern was not supported. Instead, the results suggest that while cognitive fusion links to both disordered eating and gender, gender and disordered eating operate independently in this sample.

LIMITATIONS

Several limitations should be weighed when interpreting these findings. First, the sample size was relatively small ($N = 168$), limiting statistical power to detect modest effects. A few limitations temper these conclusions. Because the design was cross-sectional and correlational, causal order cannot be established: it is equally possible that fusion feeds into disordered eating, that



disordered eating heightens fusion with self-relevant thoughts, or that some third factor drives both. Gender was additionally coded as a binary variable, which cannot capture the fuller range of gender identity and may flatten some of the sociocultural nuance underlying these associations. To better clarify how and for whom cognitive fusion leads to disordered eating, future investigations would benefit from utilizing longitudinal or experimental research designs that can establish directionality.

CONCLUSION

This study investigated how cognitive fusion, disordered eating, and gender are related within a sample of 168 participants. A significant positive correlation was found between cognitive fusion and disordered eating, demonstrating that higher levels of cognitive fusion correspond to increased disordered eating attitudes. Additionally, cognitive fusion significantly varied by gender, as male participants exhibited higher scores compared to female participants. In contrast, gender did not show a significant relationship with disordered eating, implying that eating-related difficulties remained relatively consistent across genders in this sample. To conclude, these findings partially substantiate the hypotheses of the study, highlighting cognitive fusion as a key psychological variable associated with body image issues and eating difficulties. Therefore, clinical interventions focused on reducing cognitive fusion may be effective in alleviating tendencies toward disordered eating.

Acknowledgement

The author sincerely thanks all participants and the individuals who supported for data collection. Their cooperation and assistance were invaluable to the completion of this study.

Conflict of Interest: The authors declare no conflict of interest.

REFERENCES

- Ferreira, C., Palmeira, L., & Trindade, I. A. (2014). Turning eating psychopathology risk factors into action: The pervasive effect of body image-related cognitive fusion. *Appetite*, 80, 137–142. <https://doi.org/10.1016/j.appet.2014.05.019>
- Ferreira, C., Trindade, I. A., Duarte, C., & Pinto-Gouveia, J. (2015). Getting entangled with body image: Development and validation of a new measure. *Psychology and Psychotherapy: Theory, Research and Practice*, 88(3), 304–316. <https://doi.org/10.1111/papt.12047>
- Garner, D. M., Olmsted, M. P., Bohr, Y., & Garfinkel, P. E. (1982). The Eating Attitudes Test: Psychometric features and clinical correlates. *Psychological Medicine*, 12(4), 871–878. <https://doi.org/10.1017/S0033291700049163>
- Gillanders, D. T., Bolderston, H., Bond, F. W., Dempster, M., Flaxman, P. E., Campbell, L., Kerr, S., Tansey, L., Noel, P., Ferenbach, C., Masley, S., Roach, L., Lloyd, J., May, L., Clarke, S., & Remington, B. (2014). The development and initial validation of the Cognitive Fusion Questionnaire. *Behavior Therapy*, 45(1), 83–101. <https://doi.org/10.1016/j.beth.2013.09.001>
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2012). *Acceptance and commitment therapy: The process and practice of mindful change* (2nd ed.). Guilford Press.



- MacNeill, L. P., Best, L. A., & Davis, L. L. (2017). The role of personality in body image dissatisfaction and disordered eating: Discrepancies between men and women. *Journal of Eating Disorders*, 5, Article 44. <https://doi.org/10.1186/s40337-017-0177-8>
- Ocker, L. B., Lam, E. T. C., Jensen, B. E., & Zhang, J. J. (2007). Psychometric properties of the Eating Attitudes Test. *Measurement in Physical Education and Exercise Science*, 11(1), 25–48. <https://doi.org/10.1080/10913670709337010>
- Scardera, S., Sacco, S., Di Sante, J., & Booij, L. (2021). Body image-related cognitive fusion and disordered eating: The role of self-compassion and sad mood. *Eating and Weight Disorders*, 26(2), 483–490. <https://doi.org/10.1007/s40519-020-00868-w>
- Trindade, I. A., & Ferreira, C. (2014). The impact of body image-related cognitive fusion on eating psychopathology. *Eating Behaviors*, 15(1), 72–75. <https://doi.org/10.1016/j.eatbeh.2013.10.014>

Cite this Article:

Panwar, Govind., Sirohi, Priyanshi. (2026). Body Image-Related Cognitive Fusion and Disordered Eating Among Adolescents: Investigating the Role of Gender. *The Research Dialogue*, 5(2), 305–311., Volume-05, Issue-02, July-2026.

DOI: <https://doi.org/10.64880/theresearchdialogue.v5i2.31>



This is an Open cess Journal / article distributed under the terms of the Creative Commons Attribution License CC BY-NC-ND 3.0) which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. All rights reserved.

Disclaimer/Publisher's Note: The views, findings, and opinions expressed in this publication are solely those of the author(s). The publisher and editorial team are not responsible for any errors, claims, or consequences arising from the use of the published content.

RESEARCH
DIALOGUE

Manifestation Of Perfection



CERTIFICATE

of Publication

This Certificate is proudly presented to

Govind Panwar¹, Priyanshi Sirohi²

Body Image-Related Cognitive Fusion and Disordered Eating Among Adolescents: Investigating the Role of Gender

Dialogue' Peer-Reviewed / Refereed Research Journal and E-ISSN: 2583-438X,
Volume-05, Issue-02, Month July, Year-2026, Impact Factor (RPRI-4.73/ 6.79)

Dr. Lohans Kumar Kalyani
Editor- In-chief



Dr. Neeraj Yadav
Executive-In-Chief- Editor

Note: This E-Certificate is valid with published paper and the paper must be available online at: <https://theresearchdialogue.com/>
DOI : <https://doi.org/10.64880/theresearchdialogue.v5i2.31>