



香港中文大學(深圳)
The Chinese University of Hong Kong, Shenzhen

Is the relationship between BMI and body appreciation explained by body dissatisfaction and body image inflexibility among older adults? A study among Chinese older men and women

Hengyue Zhang¹, Jianwen Song¹, Yiqing Zhao¹, Anna Brytek-Matera², and Jinbo He¹

¹ The Chinese University of Hong Kong, Shenzhen, China

² Institute of Psychology, University of Wrocław, Wrocław, Poland

Email address: hengyuezhang@link.cuhk.edu.cn; hejinbo@cuhk.edu.cn



SCientific and Creative Research on
Eating, Appetite and Media

Introduction

- **Body appreciation**, defined as respecting the unique features, functionality, and health of one's body, as well as rejecting media-promoted ideas of body image as the single form of beauty, is linked to many indices of well-being (e.g., self-esteem, life satisfaction) and is a protective factor of body image disturbances (e.g., body dissatisfaction, poor body esteem).
- Limited research has explored the mechanisms relating **body mass index (BMI)** to **body appreciation**. Many of the previous studies were conducted in Western countries and looked at younger samples. Older adults, especially in East Asia, remain insufficiently examined.
- **Hypothesis :**
H1: BMI is negatively related to **body appreciation** in older adults in both sexes.
H2: BMI affects **body appreciation** through the mediating role of **body dissatisfaction** and **body image inflexibility** among elderly Chinese women and men.

Methods

- **Sample:** 313 older Chinese adults (151 men, 48.2%) from three Chinese cities, including Shenzhen, Guangzhou, and Qiqihar.
- **Measurement:** Participants were given 1 hour to complete the questionnaire contained the nine-item body dissatisfaction subscale of the Eating Disorder Inventory-3 (EDI-BD), the short-form Body Image Acceptance and Action Questionnaire (BI-AAQ), and the Chinese version of the Body Appreciation Scale-2 (BAS-2)
- **Statistical analysis:** Statistical analysis was performed using R software; specifically, the *lavaan* package was used for mediation analysis. Pearson's bivariate correlation was used to examine correlations between all variables.

Results

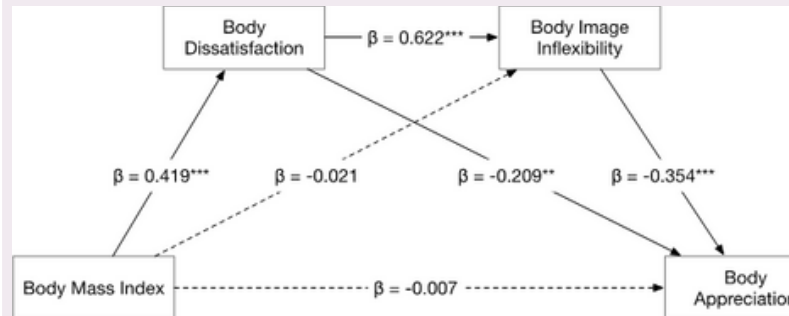


Figure 1. Regression models of the mediation analysis for women (R² = 0.284)

Note: ** p < .01, *** p < .001.

Results cont.

Older adult men:

BMI was not significantly correlated with body appreciation in older adult men, and the effect size was weak ($r = -.07$, $p = .38$).

Older adult women:

- BMI was negatively correlated with body appreciation ($r = -.28$, $p < .001$), positively correlated with body dissatisfaction ($r = .42$, $p < .001$) and body image inflexibility ($r = .30$, $p < .001$).
- Body dissatisfaction and body image inflexibility fully mediated the relationship between BMI and body appreciation ($R^2 = 0.286$).
- The indirect effect from BMI to body appreciation via body dissatisfaction (Path 1) was statistically significant, with a total indirect effect of -0.112 (95% CI -0.229 , -0.028).
- The indirect path from BMI to body dissatisfaction through both body dissatisfaction and body image inflexibility was significant, with an indirect effect of -0.081 (95% CI -0.171 , -0.026).

Discussion

- Results confirmed partial *hypothesis 1*, that the relationship between BMI and body appreciation is significant only in women
- Results proved the *hypothesis 2* that body dissatisfaction and body image inflexibility serve as mediators in the relationship between BMI and body appreciation

Limitation:

1. the current study used a cross-sectional design, so that it is difficult to prove a causal relationship between BMI and body appreciation via the mediation of body dissatisfaction and body image inflexibility.
2. the potential lack of generalizability of the findings, as the current study lacks samples of non-Chinese older adults.
3. the sample ages ranged from 51 to 92 years old. Some of the participants had difficulty completing the questionnaire independently due to their age and required assistance from researchers.

Conclusion

The current study found that body dissatisfaction and body image inflexibility fully mediated the relationship between BMI and body appreciation among older Chinese women. In the context of China's rapidly aging population aging, our findings provide insight into the relationship between BMI and body appreciation among older adults.

Tencent meeting link

If you have any questions about the study, please feel free to discuss with us via Tencent meeting.