

ORIGINAL RESEARCH

Disordered Eating Attitudes Among University Students: The Role of Psychological Distress

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ABSTRACT

Objective • The aim of this study was to explore the relationship between psychological distress and disordered eating attitudes.

Methods • The study design was cross-sectional study. The 12-item General Health Questionnaire (GHQ-12) and Eating Attitude Test-26 (EAT-26) were used to measure psychological distress and disordered eating attitudes, respectively. The data were analyzed using SPSS version 20.0 Software (SPSS Inc, II, Chicago, IL, USA). Description statistics were used for height, weight, BMI, age, EAT-26 scores and GHQ-12 scores. Pearson's correlation analysis was performed to explore the relationship between the EAT-26 scores and the GHQ-12 scores.

Results • The overall prevalence of disordered eating attitudes was 4.6%. The mean GHQ-12 score in subjects with disordered eating attitude was higher than that of the control group ($P < .05$) in both the male and female groups.

Conclusion • Our study suggested that psychological distress is associated with disordered eating attitudes. BMI and gender turned out to not be correlated with disordered eating attitude. The findings of this study revealed that university students who have psychological distress also have a tendency toward disordered eating attitudes. (*Altern Ther Health Med.* 2021;27(5):58-60).

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INTRODUCTION

The term “eating disorders” refers to a range of psychological illnesses that are characterized by significant disturbances in eating attitudes and behaviors.¹ The worldwide prevalence of disordered eating is high.² A Chinese study showed that 2.17% of college students were at high risk of developing eating disorders.³ However, there is a lack of epidemiologic studies on eating disorders among college students. College students also experience issues related to obesity and sleep disorders.^{4,5} Previous studies have focused on the relationship between obesity and eating disorders.^{6,7}

To date, there are no efficient methods of preventing eating disorders. Psychotropic medications are commonly used in the treatment of eating disorders in children and

adolescents.⁸ We hypothesized that psychological distress may be associated with disordered eating attitudes among college students. However, little is known about the relationship between psychological distress and disordered eating attitudes among college students in China.

The goal of this study was to determine whether psychological distress is associated with disordered eating attitudes among college students in China, and to offer basis that can be used to prevent disordered eating attitudes.

METHODS

Participants

A cross-sectional study was carried out to explore the relationship between psychological distress and disordered eating attitudes among college students. A total of 1051 students (451 males and 600 females), age between 16 and 24 years were randomly selected from a college in Anhui province in China. All participants agreed to provide their personal information, as well as written informed consent.

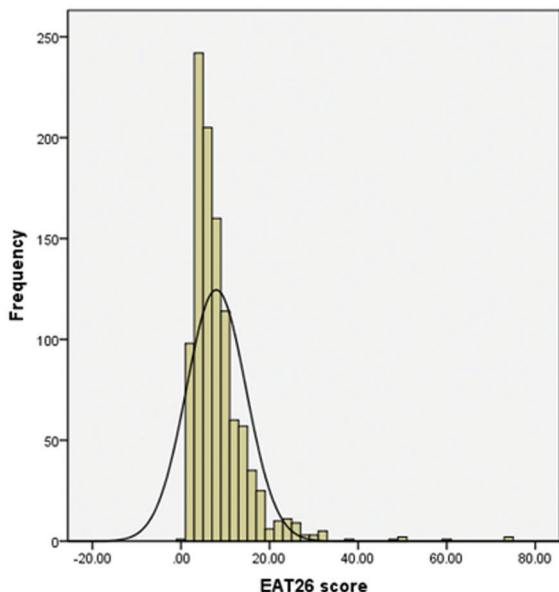
Measurement

Demographic Characteristics. Self-administered questionnaires regarding gender, weight and height were distributed. The body mass index (BMI) of participants was calculated according to their weight and height.

Table 1. General Demographic Characteristics of Study Participants

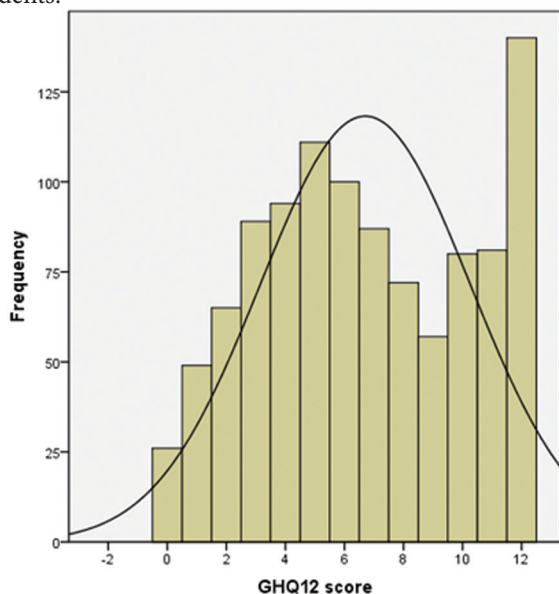
Variable	n	Minimum	Maximum	Mean	SD
Height, m	1051	1.28	1.9	1.67	0.08
Weight, kg	1051	40	130	56.5	10.56
BMI	1051	15.24	40.12	20.18	2.47
Age, years	1051	16	24	19.54	1.32
EAT-26 score	1051	0	73	7.95	6.73
GHQ-12 score	1051	0	12	6.7	3.55

Figure 1. Distribution of the EAT-26 score in college students.



Note: Mean = 7.95; SD = 6.729; n = 1051

Figure 2. Distribution of the GHQ-12 score in college students.



Note: Mean = 6.7; SD = 3.546; n = 1051

Eating Attitude Test. The Eating Attitude Test-26 (EAT-26) is an instrument used to screen for disordered eating attitudes.^{9,10} The EAT-26 consists of 26 questions, and each question (except the 25th question) contains 6 response options, which were scored from 0 to 3 (0 = seldom, hardly ever or never; 1 = often; 2 = almost always; and 3 = always). The 25th question was reverse scored (3 = never; 2 = almost never, 1 = seldom; 0 = always; nearly always or often). The total score of the EAT-26 is the sum of the scores for each question. Scores >20 were taken to indicate disordered eating attitude. The Cronbach’s α (alpha) of EAT-26 was 0.89 in this study.

Psychological Distress. The 12-item General Health Questionnaire (GHQ-12)¹¹ was used to evaluate psychological distress. The GHQ-12 questionnaire contains 4 possible responses to each item. The 4 options consist of the following: “Better than usual = 0”; “same as usual = 1”; “worse than usual = 2”; and “much worse than usual = 3.” The higher the total score, the greater the severity of the mental health problem.

Data analysis

The data were analyzed using SPSS version 20.0 software (SPSS Inc, IL, Chicago, IL, USA). Description statistics were used for height, weight, BMI, age, EAT-26 scores and GHQ-12 scores. Pearson’s correlation analysis was performed to explore the relationship between the EAT-26 scores and the GHQ-12 scores. The figures were compiled using SPSS version 20.0 software. A *P* value >.05 was considered statistically significant.

RESULTS

A total of 1051 students (451 males and 600 females) age between 16 and 24 years were recruited for this study. The general demographics of the students are shown in the Table. The mean height, weight, BMI, age, EAT-26 score and GHQ-12 score were 1.67, 56.5, 20.18, 19.54, 7.95 and 6.7, respectively. The results revealed that 4.6% (48 out of 1051) of the students exhibited disordered eating attitudes.

We first explored the distribution of the EAT-26 and GHQ-12 scores (Figures 1 and 2). The EAT-26 score and GHQ-12 score were normally distributed. Next, Pearson’s correlation analysis was performed to explore the relationship between the EAT-26 score and the GHQ-12 score. The results indicated that the EAT-26 score was positively associated with the GHQ-12 score ($r = 0.089$; $P = .004$).

DISCUSSION

The main findings of this study were that the overall prevalence of disordered eating was 4.6%, which is higher than the prevalence rate found in a meta-analysis in China.¹² The prevalence of disordered eating attitudes may vary according to the region, study major and the university being studied.

Another finding of this study was that the EAT-26 score was positively associated with the GHQ-12 score. A previous

study found that disordered eating attitudes, food addiction and insomnia showed mediated effects in the temporal association of psychological distress and excess weight.¹³ Another study also found that intervention programs targeting food addiction and psychological distress in adolescents may have significant positive effects on outcomes for weight-related self-stigma and binge eating.^{14,15} Our results highlighted the idea that psychological distress may be associated with disordered eating attitudes. However, further studies are required to elucidate any causal relationship.

Study Limitations

Some limitations should be considered in the present study. A relatively small sample of college students was included in the study. In addition, a cross-sectional study can not explain the causal relationship between psychological distress and disordered eating attitudes. However, it is exciting that the findings of this study identified a direction for future research. It is unclear whether environmental factors have effect on disordered eating attitudes. Our study reveals that psychological distress is associated with disordered eating attitudes. Preventing psychological distress may prove effective in reducing the incidence of disordered eating attitudes.

CONCLUSION

Our study suggested that psychological distress is associated with disordered eating attitudes. BMI and gender turned out to not be correlated with disordered eating attitudes. Our study findings revealed that college students with psychological distress also have a tendency toward disordered eating attitudes.

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