Depression Anxiety, Stress and Maladaptive Eating Attitudes in Women with no Physical Exercise

Sarah Mahmood; Sidra Sattar

Abstract
Maladaptive eating attitudes have been vastly observed as leading cause of obesity and mental health problems among women. In current era, respective to the trends of fashion, media and society, when the physique (body shape) of women is not in shape, depression anxiety and stress occupy their mental health. This leads to maladaptive eating attitudes among women who are physically inactive while others adopt fitness plans like joining fitness centers for physical exercise. The research intended to examine the difference in co-occurrence of maladaptive eating attitudes, depression, anxiety and stress between two groups of women. Five hundred women (N = 500) were approached. 250 from fitness centers with exercise regularity and 250 from residences and academic institutes of Pakistan who never had any exercise. Scales applied were Beck's Depression Anxiety Stress Scale (DASS-21) and Eating Attitude Test (EAT-26). Commonly accepted Body Mass Index (BMI) ranges, overweight: 25 to 30 and obese: over 30, weight machine and BMI formula were considered for data collection. Data was analyzed using Statistical Package for Social Sciences (SPSS 21st version). Findings suggested that there was strong positive correlation between irregular eating attitudes and depression, anxiety and stress among women who had never done any physical exercise. Results prominently indicated that women who had been physically inactive (M = 1.45, SD = .254) scored higher on EAT-26 scale $t = 12.6$, as compared to women who exercised regularly (M = 1.09, SD = .374). Maladaptive eating attitudes, depression, anxiety and stress reveal higher levels of interrelatedness with each other. Physical exercise had positive impact on reducing symptoms of all ailments and maladaptive attitudes among women. Physical exercise thus cures long-term negative consequences of depression anxiety and stress like “sitting disease” and help women stay healthier.

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Keywords: Sports, brain, physical activity.

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Introduction
Depression is identified as such a deranged disorder in which lunatic's mental capability and day to day tasks of routine are severely affected. Depression and eating disorders are most prevalent in young people worldwide; depression currently estimated as the fourth leading etiology of disability and anticipated that it will become the second progressive cause of illness by 2020 throughout the world similarly, According to Eisenberg, Renfrew Center Foundation for Eating Disorders estimated 24 million individuals bear eating disorder problems worldwide. Eating disorders, characterized by anorexia nervosa and bulimia nervosa are serious somatic and mental-health problems prevailing substantially in young adulthood or adolescence specifically in youth females. The term ‘eating disorder’ relates to instant alarms of eating behaviors that consequence in smashed mental or bodily functioning. Period of danger for disturbances in eating behaviors happens in 10-24 years of lifespan. Research revealed that forty percent of students (or 23% of if students utilizing a further preservationist methodology) met criteria for conceivable extensive depressive symptomatology.

Other study has established that body dissatisfaction and eating problem side effects are unequivocally interrelated with symptoms of depression. A few scholars recommend that depression go before the eating disorder, and maybe hopelessness expand one's susceptibility to increasing an eating disorder.
Stress

Uncertainty appears to influence the performance in both positive and negative ways under the presence of other factors. Young people are found to experience more daily and routine negative events and more stressful life events.

Worry also can be addressed dynamically with positive coping strategies, or the more generally adequate strategy were denial strategies that frequently involved stress eating that could launch self-blame, dieting, fat-talk, and disordered eating behavior. Among college women concerns about weight, body image, and eating behaviors are widespread. In one longitudinal study of first year women found that body dissatisfaction was the strongest interpreter for disordered eating in the seven month marker prospective study. Furthermore, incompetence or general feelings of insufficiency and negative influence predicted a pattern of disordered eating, further they suggested that stress may impact these relational bounds. Even though strain has been recommended as another possible risk factor, the person's capability to deal with nervousness or emotional disorder has not been interpreted. In a research center following an intense stressor people have a tendency to eat more than in a control session, if elevated in cortisol reactivity and stressor people have a tendency to eat more than in a control session.

Anxiety

Anxiety is a worldwide considerable distraught state of self that the majority of people experience within one time in their life span. In eating disorders the part of anxiety has been clearly portrayed by various authors. Moreover, patients with eating problems have reported that eating binge are more anticipated that would be activated by anxiety than hopelessness.

Research demonstrates that consumption problems and fretfulness issue often co-happen. Researchers have always uncovered that a substantial number of patients with anorexia nervosa (AN) or bulimia nervosa (BN) suffer one or more anxiety disorders. Studies demonstrate that socially, concerns of physique has bring into being to relate with various psychosocial variables rationally connected with evaluative concern while worldwide self-regard, body regard, body discontent and weight dissatisfaction.

Furthermore, social body restlessness has additionally been found to associate with physical competency between youngster gymnasts, depressing cognition all through physical form examinations and attitude towards exercise settings. The relationship among anxiety and eating disorders has likewise concerned noteworthy consideration. Although consistent conclusion recommending relationship between emotions the same as anxiety and eating overindulgence symptomatology, the particular part of anxiety in the maintenance of dining disorders remains a focus of debate. Levels of anxiety were contrarily interrelated with self-regard. These results have been affirmed by a few previous studies.

Eating Attitudes:

Flawed eating issues are a standout amongst the most well-known psychiatric issues confronted by women and are portrayed by chronicity and elevated rates of backslide. These feasting on issues generally develop in teenagers or young middle age and usually occur in females but are gradually more seen in little children. It is supposed that the occurrence of eating issues in common is growing among immature young ladies. Further particularly, body figure dissatisfaction, dieting and alternations in eating patterns seem to be an imperative supplementary issue related to low self-esteem, while it is hard to know whether this is basically a reason or an impact. Most likely one of the primary psychiatric issues experienced by young ladies and youthful grown-up ladies are eating issues and are commonly related with mental suffering, and hopelessness.

Maladaptive Attitudes:

Dysfunctional behaviors can be surrendered by the recognition that not every single psychiatric issue is best gestate from practical point of view. For example alcohol/substance use, self-harm, and dietary problems might be greatest certain by utilizing a utilitarian perspective, while extreme introvertedness, schizophrenia and mental retardation might be best comprehended from a disorder/disease perspective In the etiology of feeding pathology researches have been concerned with perfectionism as an important factor and has suggested that unstable perfectionism might explain for how other variables connect to disordered eating flawed eating-related behaviors might be predominantly linked with specific emotions for example, using EMA found that self conscious emotions both enlarged prior to binging and/or purging and decrease subsequent such behavior, yet when taking into account changes in other emotions that are unpleasant.

Some researchers reported a high occurrence of unfit consumption designs like pigging out no control on eating and nonstop chewing or “eating” which have been identified with augmented caloric ingestion, poor results, and inevitably malfunction of treatment.

Objectives of the Study:

1. To investigate the relationship between depression, anxiety, stress and maladaptive eating patterns among women.
2. To investigate that women have higher levels of maladaptive eating patterns if they never joined a fitness club or have never practiced any physical exercise.
Hypotheses of the Study:

H1: There is significant prominence of depression, anxiety, stress and maladaptive eating patterns among women with no physical exercise.

H2: Women adapt excessive maladaptive eating patterns if they have never practiced physical exercise.

Methods

Participants

Overall 500 participants were approached to take part in current study from Bahauddin Zakariya University Multan, Gyms and fitness centers. All the participants were females. Participants were recruited within the age from 18 to 50 years. Depression, anxiety, stress and eating attitudes pathology was assessed among the sample.

Instruments

Two instruments were utilized as a part of the research.

1. Eating Attitude Test (EAT-26)
2. Depression Anxiety Stress Scale (DASS21)

Eating Attitude Test (EAT-26)

The Greek adaptation of the EAT-26 was utilized inclusively upon the individuals (females) who participated in the research to rate their concurrence with 26 explanations about weight and nourishment. The EAT-26 was utilized to survey scattered eating practices. The EAT-26 is a self-report measure that evaluates symptoms of eating overindulgence problems and different qualities connected with dietary issues (e.g., body dissatisfaction and weight concerns). Participants were asked to rate their control of attitudes and behaviors toward foodstuff and weight utilizing the response options of never, once in a while, sometimes, regularly, frequently, and always. The reliability of EAT-26 scale is ($\alpha = .91$). The internal consistency of EAT-26 is found ($\alpha = .80$) in the current study which shows the adequate reliability of all items used in the scale.

Body Mass Index (BMI)

The EAT-26 incorporates particular questions on height, weight and gender that can be utilized to figure Body Mass Index (BMI) for the purpose of figuring out whether one is “at danger” for an eating problem that one's body weight is extremely underweight or overweight taken into account. It is calculating by dividing weight (in kilograms) by height in meters and then divides again by height in meters ($\text{kg/m}^2$). The subsequent standard formula was used to calculate the body mass index: $\text{BMI} = \frac{\text{weight in kilograms}}{\text{height in metric squared}}$. An intermediary measure of body's obese ratios suggested by the World Health Organization as an over all inclusive basis of adult weight.\(^{27}\) BMI values of P25 and P30 were used as criteria to specify overweight and obesity, correspondingly. In spite of the fact BMI is an advantageous and helpful weight classification tool as indicated by Garner,\(^{28}\) BMI is considered as profoundly reliable weight classification tool.

Depression, Anxiety and Stress Scale (DASS 21)

Depression Anxiety and Stress Scales-21 (DASS-21).\(^{29}\) The DASS21 is a 21-item self-report gauge scale that measures levels of Depression (e.g., “I cannot appear to understanding any positive feeling at all”), Anxiety (“I encounter trembling (e.g., in my hands)”) and Stress symptoms (“I think that it is hard to relax”). Items are evaluated in a 4-point Likert scale (0 ¼ ‘did not make a difference to me at all’ to 4 ¼ ‘applied to me all that much, or more often than not’). The reliability of DASS-21 scale is ($\alpha = .93$). The internal consistency of DASS-21 has been ($\alpha = .78$) in the present study which shows the adequate reliability of all items used in the scale.

Research Design

Quantitative research method was applied to conduct the research because it was appropriate method for the study. Correlational research design was used in the form of survey. Standardized questionnaires were utilized to assess association between depression, anxiety, stress and eating attitudes.

Procedure

The participants for this study were selected through convenient sampling technique. Participants in the current research involved completion of questionnaire. Participants were given the questionnaire of Eating Attitude Test (EAT-26) which was utilized for screen eating related symptoms and Depression Anxiety Stress Scale (DASS-21) which assesses the essential attributes of depression, anxiety and stress. Participants were educated with respect to the secrecy of their reactions and their assent was obtained for participating in the present study. The task for the participants was to complete the both questionnaires. When participants completed the questionnaires all data was collected and both scales were scored according to scoring keys.

Statistical Analysis

The data was gathered through surveys and analyzed by utilizing the statistical package of social sciences SPSS 20.0 version. This SPSS software was used for statistical analysis. Pearson coefficient association was outline to dessert correlation among depression anxiety stress and eating attitudes. Independent Sample t-test was used to check the women score on DASS of those who practiced physical exercise or not.

Results

This chapter concentrates on statistical of research exploration facts by utilize SPSS 20.0. Significant level .05 was utilized for all analysis. Descriptive statistics was utilized to measure mean, standard deviation, and alpha
Skewness index was within acceptable range. Table 3 presents the relationship between depression anxiety stress and eating patterns. Joined fitness club physical exercise (PE) has been negatively correlated with duration of PE ($r = -.610, P > .000$) depression, anxiety, stress, eating attitude and body mass index. Less duration or no physical exercise had been positively correlated with depression, anxiety, stress, eating patterns and body mass index ($r = .279, P > .000$). Depression, anxiety, stress eating attitude and body mass index are positively correlated with each other ($r = .50, P > .000$). Findings also revealed that there is a significant correlation between depression, anxiety, stress and eating attitudes.

Discussion

Current study investigates the relationship between depression, anxiety, stress and maladaptive eating attitudes among women. The results of present study indicated connection between depression, anxiety, stress and eating attitudes. Hypothesis 1 stated that there is a significant relationship among depression, anxiety, stress and eating attitudes. It is sustained by the investigation of facts is significant at $P < .01$. Results presented in table 3.3. It is clear that depression, anxiety, stress and eating attitudes are positively correlated with each other ($r = .50, P > .000$). Findings also revealed that there is a significant association between depression, anxiety, stress and eating attitudes. A research concludes that females with eating attitudes often introduce elevated rates of comorbid emotional well-being issues, range from depression to anxiety, and substance misuse. Psychological factors have been promptly connected with dietary problems, most notably, with depression, anxiety, stress and eating attitudes. A research

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<tbody>
<tr>
<td>Eating Attitude Test</td>
<td>0.826</td>
<td>26</td>
</tr>
<tr>
<td>Depression Anxiety Stress Scale</td>
<td>0.788</td>
<td>21</td>
</tr>
</tbody>
</table>

Table 2 Descriptive Statistics for the study variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
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Table 3. Pearson correlations (N = 500)

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Abbreviations: PE, Physical Exercise; DOPE, Duration of Physical Exercise; EAT, Eating Attitude Test; BMI, Body Mass Index.

Table 4 Mean, Standard Deviation, t-value and p-value of women with PE and women without PE on maladaptive eating attitude among females (N=500).

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Note: $P < .05$  

Abbreviations: PE, Physical Exercise.

reliability. Pearson coefficient correlation was ascertained to analyze relationship between depression, anxiety, stress and eating attitudes. Independent -Samples $t$ test was conducted for the analysis of females DASS score of the ones with and without physical exercise to check their abnormal or adaptive eating attitudes difference.

Physical Exercise

Table 2 show descriptive statistics for all variables of exploration study. Eating Attitude Test had most extreme mean quality 1.31 and minimum value of anxiety is

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Limitations

Every research has certain limitations and demerits. There are also various draw backs in the research, which are needed to be revised and discussed upon.

- Limitations of this study incorporate the way that all the information gathered from non clinical sample of university students and gyms which may diverse from clinical eating disorder patients.
- Time given to conduct study was not really enough to complete it properly with detailed interview of the candidates.
- The research was conducted only on women. It can be conducted on men as well for comparisons of gender differences between people with and without physical exercise in future.

Suggestions

Each research has the capacity to be enhanced; there are a few recommendations for further studies.

- Study can be explained by drawing a huge sample from diverse urban areas. It is proposed that information ought to be taken from all over Pakistan for more compelling consequences.
- In strength the interviews ought to be taken for the improved perspective of phenomenon.
- It can further be studied with another variable, ‘coping strategies’ to find either women adapt them or not when they are irregular among eating attitudes during depression, anxiety and stress.

Conclusion

The results of the present study demonstrate the relationship between depression, anxiety, stress and abnormal eating attitudes such as binge disorder, overeating etc. Past studies additionally demonstrate that there is a strong relationship between these ailments and behaviors. The objective of research was to investigate the relationship between depression, anxiety, stress and maladaptive eating attitudes among ladies with physical exercise and without physical exercise. Overall results support the study hypotheses.

References