Body Image and its Relationship to Anorexia Nervosa for Male and Female Practicing Sport Activity

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Abstract: The research aims to identify the relationship between body image, anorexia nervosa, thin and weight for the sports activity male participants, the relationship between body image, anorexia nervosa, thin and weight for the sports activity female participants and the differences between male and female sports activity participants in the body image disorder, anorexia nervosa, thin and weight. The researcher has used the descriptive method as it suits the nature and aims of the research. The research society was 422 males and 350 females practicing sports activity in the age stage 18-20 years old of whom are regular visitors to the health clubs and sports training centers, characterized by thin. The research experiment was conducted on a sample of 200 individual purposively selected of the thin males and females practicing sport activities ranging between 18 and 20 years old. The sample individuals deliberately distributed to two equal groups in number (first group: 100 males practicing sport activities and second group: 100 females practicing sport activities). Results showed that there is a statistical significance correlation between body image and all the variables on topics for males, where the correlation coefficient value between body image and anorexia nervosa disorder was 0.22 and 0.21 between body image and body mass index and between body image and weight was 0.22. There is a high statistical significance correlation between body image and all the variables on topics for females practicing sports activity. Where the correlation coefficient value between body image and anorexia nervosa disorder was 0.21 and 0.35 between body image and body mass index and between body image and weight was 0.36. There are significant differences between male and females practicing the sports activity in the age group of 18-20 years old in all variables on topics in favor of the females practicing the sports activity.

Key words: Body Image % Anorexia Nervosa % Male % Female Practicing Sport Activity

INTRODUCTION

Lifestyle changed and the dietary habits as well, due to the social and cultural developments in the society. Recently many people are ignoring the importance of attention to food systems, with the encouraging propaganda and ads to slimming and weight loss and the youngest desire to appear as in the male and female fashion models pictures, moreover eating disorders increased because of extra lean mania, shape and weight of the body, where it doubled nine times accordingly.

Al-Kady [1], Shaker [2] and Obroton [3] refereed that the human body image is the image of our body that we form within our minds and is the way that our body appears to us. The body image may be disturbed for being incomplete, as there is a direct relationship between body image perception and the person's behavior.

Anorexia nervosa is a reaction to a distorted and unrealistic image of the body in the mind because of intense fear of gaining weight. That begins in adolescence where those suffering from these symptoms resort to practice hard and continuous sport for long periods and in the same time skip eating. Person with that kind of disorder experience a distorted image of his body, thus believes that he is very obese, although he is weighing less than the normal rate of 15% below the average weight [4-7]. Anorexia nervosa is a disorder has many symptoms and serious health complications. These represented in gracile and severe weight loss between 30 to 40% of normal body weight, along with a decrease in body mass index and muscle mass with the presence of symptoms of malnutrition, such as the emergence of bones, general weakness, severe wasting, low blood pressure and disorders of the heartbeats [4, 8-10]. There is a relationship between anorexia nervosa and body image and losing body weight [11-13].

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The researcher refers that the anorexia nervosa disorder is a clear reflection of the mental image disorder related to the body formation and the consistency between these different parts. It is a nosomania of being obese, these fears are so strong that the person forces himself to hunger just to become thin enough as he imagine and should be in terms of the body image he imagined. Thus, the idea of eating reached the limits of hatred with the continuous conflict within them as they deny hunger. Losing appetite is one of the disorders related to nutrition disorders and one of the reasons for thin. But the non-intentional thin where the person is convinced that he is suffering from an increase in the weight and cares for everything related to body weight and permanent obsessive of agility, although he is too thin. That leads him to some unhealthy nutrition practices, attitudes and behaviors such as the excessive practice of sports activity and at the same time addressing food very low in calories or deprivation of food by hard fast for many days in order to reduce weight, which affects the health status.

The research aims to identify:

C The relationship between body image, anorexia nervosa, thin and weight for the sports activity male participants
C The relationship between body image, anorexia nervosa, thin and weight for the sports activity female participants
C The differences between male and female sports activity participants in the body image disorder, anorexia nervosa, thin and weight.

MATERIALS AND METHODS

The researcher has used the descriptive method as it suits the nature and aims of the research. The research society was male and female practicing sports activity in the age stage 18-20 years old of whom are regular visitors to the health clubs and sports training centers, characterized by thin, representing the society of the research that reached 422 males and 350 females. The research experiment was conducted on a sample of 200 individual purposively selected of the thin males and females practicing sport activities ranging between 18 and 20 years old. The sample individuals deliberately distributed to two equal groups in number (first group: 100 Males practicing sport activities and second group: 100females practicing sport activities).

Table 1 illustrates that all coefficients of skeweness values for the variables on topics ranged between ±3, which refers to the homogeneity of the sample and free of the defects of the un-indifferent distributions for males and females participants.

Tools of Collecting Data

Tools and Equipments:
C A Restameter device for measuring height
C A medical scale for measuring weight (kg)
C The scale of measuring body image disorder.
C Body mass index (BMI) calculated by the relation Weight (Kg.)/height square (m²).
C The scale of anorexia nervosa.

<table>
<thead>
<tr>
<th>No.</th>
<th>Variables</th>
<th>Measuring unit</th>
<th>Sample's kind</th>
<th>Arithmetic mean</th>
<th>Standard deviation</th>
<th>Medium</th>
<th>Coefficient of Skeweness</th>
</tr>
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<tr>
<td>1</td>
<td>Age</td>
<td>Year</td>
<td>Males</td>
<td>19.34</td>
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<td></td>
<td></td>
<td></td>
<td>Females</td>
<td>18.71</td>
<td>0.81</td>
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<td>Height</td>
<td>Cm.</td>
<td>Males</td>
<td>171.20</td>
<td>2.36</td>
<td>171.30</td>
<td>0.02</td>
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<tr>
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<td></td>
<td></td>
<td>Females</td>
<td>155.82</td>
<td>2.64</td>
<td>156.25</td>
<td>-0.49</td>
</tr>
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<td>3</td>
<td>Body image</td>
<td>Kg.</td>
<td>Males</td>
<td>55.27</td>
<td>6.99</td>
<td>57.00</td>
<td>-0.53</td>
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<td></td>
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<td>8.18</td>
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<td>Degree</td>
<td>Males</td>
<td>29.67</td>
<td>11.78</td>
<td>25.00</td>
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<td>3.68</td>
<td>38.50</td>
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<td>Body mass index</td>
<td>Kg./m²</td>
<td>Males</td>
<td>18.66</td>
<td>0.64</td>
<td>18.62</td>
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<td>Females</td>
<td>42.92</td>
<td>1.86</td>
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</table>
Applying the Main Research Experiment: The research experiment applied in the cantor of serving society and developing environment at the Faculty of Physical Education for Boys Helwan University, Egypt for both research groups, as follows:

C Measuring total height to the nearest centimeters
C Measuring weight to the nearest kilograms
C Calculating Body mass index (BMI) by dividing Weight (Kg.)/height square (m²).
C The scale of body image disorder [14].
C The scale of anorexia nervosa [15].

RESULTS AND DISCUSSION

Table 2 illustrates that there are statistical significant correlation between body image and all the variables on topics for males participating the sports activity in the age group of 18-20 years. The value of correlation coefficient between body image and anorexia nervosa disorder was 0.21 and 0.22 between the image and body mass index and between body image and weight was 0.22. These findings are consistent prior studies [1, 2, 6] that anorexia nervosa is a reaction to a distorted and unrealistic image of the body in the mind that the body is too fat and must lose weight that results in deliberate behavior for losing weight and constant occupation with body weight and intense fear of gaining weight.

Table 3 illustrates that there are high statistical significant correlation between body image and all the variables on topics for females participating the sports activity in the age group of 18-20 years in all study variables in favor of the females. The arithmetic mean of the body image variable was 55.27 for males and 30.51 for females. The arithmetic mean of the anorexia nervosa variable was 29.67 for males and 38.27 for females. The arithmetic mean of the body mass index variable was 18.66 for males and 17.60 for females. The arithmetic mean of the weight variable was 54.70 for males and 42.92 for females. These findings are consistent with each of previous studies [11-13] that there is a relationship between anorexia nervosa and the body image and losing body weight.

Table 4 illustrates the existence of statistically significant differences between males and females participating sports activity in the age group of 18-20 years in all study variables in favor of the females. The arithmetic mean of the body image variable was 55.27 for males and 30.51 for females. The arithmetic mean of the anorexia nervosa variable was 29.67 for males and 38.27 for females. The arithmetic mean of the body mass index variable was 18.66 for males and 17.60 for females. The arithmetic mean of the weight variable was 54.70 for males and 42.92 for females. These findings are consistent with each of previous studies [11-13] that there is a relationship between anorexia nervosa and the body image and losing body weight.
CONCLUSION

C There is a statistical significance correlation between body image and all the variables on topics for males. Where the correlation coefficient value between body image and anorexia nervosa disorder was 0.22 and 0.21 between body image and body mass index and between body image and weight was 0.22.

C There is a high statistical significance correlation between body image and all the variables on topics for females practicing sports activity. Where the correlation coefficient value between body image and anorexia nervosa disorder was 0.21 and 0.35 between body image and body mass index and between body image and weight was 0.36.

C There are significant differences between male and females practicing the sports activity in the age group of 18-20 years old in all variables on topics in favor of the females practicing the sports activity.

Recommendation:

C Conducting studies to identify the effect of sports programs of different intensities associated with nutritional guidance programs on improving the body image and anorexia nervous disorder.

C The need for periodic laboratory tests along with monitoring dietary behavior of individuals in adolescence stage of both sexes of 18-20 years old.

C Providing instructional and treatment programs for females suffering from eating disorders.

REFERENCES