A study of eating disorder between athletes and non-athletes

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Abstract

The purpose of the study was to compare eating disorder of athletes and non-athletes. To achieve the purpose of the study, 60 women were selected from the affiliated colleges of Manonmaniam Sundaranar University. The selected subjects were divided into two groups with 30 subjects each namely athletes and non-athletes. The athletes are randomly selected and also, care was taken to include only those subjects who had to their credit, some distinguished performance in their respective events at various competitions. Totally 30 athletes were selected for this study. The non-athletes are considering as those who never participate in any sports activities. The eating disorder such as Anorexia Nervosa, Bulimia Nervosa, Binge-Eating Disorder were selected as dependent variables for this study. The eating disorder was measured by questionnaire namely Eating Attitude Test (EAT) which was developed by Garner & Garfinkel in 1979. The Eating Attitude Test (EAT) which contains 20 questions is an abbreviated version of the original 40-question (EAT-40) test. Participants rate their responses to statements with each of the items using a 5-point likert scale: “Always,” “usually”, “often”, “sometimes”, and “never”. Normally, the people whose score is equivalent to or greater than 20 are considered as having eating disorder symptoms. The static group comparison design was used for this study. All the subjects were tested on selected psychological variable. The data pertaining to the variables were examined by using independent’t’ test. The level of significance was fixed at .05 level of confidence for all the cases. It was concluded that, there was a significant difference exists between athletes and non-athletes on the selected eating disorders such as anorexia nervosa, bulimia nervosa and binge eating disorder. However, non-athletes showed poor eating habit when compared to athletes.

Keywords: A study of eating disorder between athletes non-athletes compare eating disorder of athletes

1. Introduction

Certified athletic trainers are in charge of preventing and treating injuries for the athletic population. If an athlete is depriving their body of the proper nutrients that are needed to replenish the body, more injuries can occur. As a certified athletic trainer, it is important to know the physical and psychological signs of an eating disorder. Seeing an athlete walk into an athletic training room who is noticeably underweight is hard to handle. It is important to understand why the athlete may have developed an eating disorder and if there are outside influences affecting them. It is the certified athletic trainers’ job to protect the athlete from injuries and that includes the injuries that can be caused by the athlete themselves (Zanarini, 2000).

Eating disorders consist of three specific diagnoses, anorexia nervosa (AN), bulimia nervosa (BN) and eating disorder not otherwise specified (EDNOS) (Franko, Wonderlich, Little & Herzog, 2004) [3]. Approximately .5 to 1% of women meet criteria for anorexia nervosa, and 1-2% for bulimia nervosa. Also, 2 to 4%, have a sub-threshold diagnosis for either of these disorders (Diagnostic and Statistical manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV); APA, 2000) [1].

Binge-eating disorder is being proposed as a new diagnostic category; however, there is currently insufficient information to warrant the inclusion of this category as an eating disorder (APA, 2000) [1]. It is not Otherwise Specified EDNOS is a heterogeneous diagnostic category for individuals who have eating disorders but do not meet all of the criteria for AN or BN. It is important to note that a diagnosis of EDNOS does not imply minor clinical significance and the individuals with this diagnosis exhibit marked distress and social or occupational impairment (Franko et al., 2004) [3].
The types of treatment programs available for individuals with eating disorders range from intensive inpatient settings (where medical consultation is provided), to partial hospital and residential programs to varying levels of outpatient care (from which the patients can receive individual/group therapy, family therapy, nutritional counseling, and general medical treatment) (APA, 2000)\(^1\).

2. Statement of The Problem
The purpose of the study was to compare eating disorder of athletes and non-athletes.

3. Methodology
To achieve the purpose of the study, 60 women athletes were selected from the affiliated colleges of Manonmaniam Sundaranar University. The selected subjects were divided into two groups with 30 subjects each namely athletes and non-athletes. The athletes are randomly selected and also, care was taken to include only those subjects who had to their credit, some distinguished performance in their respective events at various competitions. Totally 30 athletes were selected for this study. The non-athletes are considering as those who never participate in any sports activities. The eating disorder such as Anorexia Nervosa, Bulimia Nervosa, Binge-Eating Disorder were selected as dependent variables for this study. The eating disorder was measured by questionnaire namely Eating Attitude Test (EAT) which was developed by Garner & Garfinkel in 1979. The Eating Attitude Test (EAT) which contains 20 questions is an abbreviated version of the original 40- question (EAT-40) test. Participants rate their responses to statements with each of the items using a 5-point likert scale: “Always”, “usually”, “often”, “sometimes”, and “never”. Normally, the people whose score is equivalent to or greater than 20 are considered as having eating disorder symptoms. The static group comparison design was used for this study. All the subjects were tested on selected psychological variable. The data pertaining to the variables were examined by using independent t’ test. The level of significance was fixed at .05 level of confidence for all the cases.

4. Analysis of Data
The results of independent variables on each criterion variable are analysed and presented below.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Obtained t’ Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anorexia Nervosa</td>
<td>Athletes</td>
<td>30</td>
<td>50.55</td>
<td>5.97</td>
<td>3.89*</td>
</tr>
<tr>
<td></td>
<td>Non-Athletes</td>
<td>30</td>
<td>64.42</td>
<td>10.80</td>
<td></td>
</tr>
<tr>
<td>Bulimia Nervosa</td>
<td>Athletes</td>
<td>30</td>
<td>101.00</td>
<td>8.54</td>
<td>2.36*</td>
</tr>
<tr>
<td></td>
<td>Non-Athletes</td>
<td>30</td>
<td>110.33</td>
<td>10.71</td>
<td></td>
</tr>
<tr>
<td>Binge Eating Disorder</td>
<td>Athletes</td>
<td>30</td>
<td>65.67</td>
<td>3.47</td>
<td>3.62*</td>
</tr>
<tr>
<td></td>
<td>Non-Athletes</td>
<td>30</td>
<td>70.42</td>
<td>2.94</td>
<td></td>
</tr>
</tbody>
</table>

* Significant at .05 level

The table value for .05 level of significance with df 58 is 2.00. Table I indicated that, the mean values of athletes and non-athletes are 50.55, 64.42, 62.00, 68.33, 65.67 and 70.42 respectively. The obtained independent “t” ratio between athletes and non-athletes is 3.89, 2.36 and 3.62. The table value required for significant difference with df 58 at .05 level is 2.00. Since the obtained t-ratio value was greater than the required table value, it was understood that there is a significant difference exists between athletes and non-athletes on anorexia nervosa, bulima nervosa and binge eating disorder. The mean values of athletes and non-athletes were graphically represented in figure I, II & III.
Discussion on Findings
The results of the study indicate that, there was a significant difference exists between athletes and non-athletes on the selected variables such as anorexia nervosa, bulimia nervosa and binge eating disorder. Also show that, the non-athletes showed poor eating habit when compared to the athletes. The findings of the present study were supported by many research findings and few are presented below.
Hay & Bacaichunk (2007) surveyed 182 women who were college athletes from various sports and found that potentially dangerous weight control behaviors were common: 14% of the total sample reported engaging in self-induced vomiting,
and 16% indicated they used laxatives. Looking specifically at one group of athletes, Legenbauer & Herpertz (2008) [5] studied 42 collegiate women who were gymnasts and found that 26% had used self-induced vomiting and all were actively trying to diet.

Striegel-Moore, Dohm, Kraemer, Schreiber, Taylor & Daniels (2007) [7] surveyed 695 college athletes (382 women from eight sports and 313 men from seven sports) using a questionnaire developed for their study, Eating Disorders of Athletes, based on APA (2000) [1] criteria for anorexia and bulimia. The athletes were from 22 Midwest colleges and universities. Twenty-one athletes (3%) met the criteria for anorexia, including 16 women and 5 men. One hundred ninety five athletes (21.5%) met the criteria for bulimia, including 150 women and 45 men. The prevalence of eating disorders reported in this study was higher than that reported for other college students.

Stoutjesdyk & Jevne (1993) examined the prevalence of eating disorders among 191 high-performance men and women athletes (104 women and 87 men) from 14 universities and 12 clubs throughout Canada. Each participant completed the Eating Attitudes Test (Ramacciotti, Coli, Paoli, Gabriellini, Schulte & Castrogiovanni, 2005) [6]. Overall, 11 women (10.6%) and 4 men (4.6%) scored in the anorexic range (over 30) on the EAT. This prevalence for women athletes was comparable to what had been reported in other studies of university populations, but the prevalence for men was higher than respective reports from other studies examining college students.

It is inferred from the literatures and from the result of the study that there was a significant difference exists between athletes and non-athletes on eating disorder. Hence it is concluded from the result of the study and also from the literature cited above; eating disorder may varied between athletes and non-athletes and these are eye-widening numbers and should be increasing the awareness of eating disorders in collegiate athletes.

Conclusions
1. There was a significant difference exists between athletes and non-athletes on the selected eating disorders such as anorexia nervosa, bulimia nervosa and binge eating disorder.
2. Non-athletes showed poor eating habit when compared to athletes.

References