

Body Image Dissatisfaction and Disordered Eating in NCAA Division III Collegiate Student-Athletes

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ABSTRACT

Purpose: Distorted body image influencing eating behaviors is an growing issue that is prevalent among society and athletics. It is important for healthcare providers to investigate the psychosocial aspects of eating disorders and body image in order to help various athletic populations. The primary purpose of the study is to raise awareness of body image and altered eating behaviors that may have gone unnoticed in an unexpected sport population.

Methods:

- 22 teams recruited, 16 coaches agreed to participation
- Participants were 17-23 years of age
- 88 participants, 68 completed, 20 dropped out
- Three valid survey questionnaires: Sociocultural Attitudes Towards Appearance Scale-3 (SATAQ-3), The Eating Attitudes Test (EAT-26), and Figural Stimuli BMI Silhouettes Survey
- A two-way (sport type x sex) factorial ANOVA using SPSS 19.0 was performed, with an alpha level of .05

Results: There was a significant positive correlation between SATAQ-3 and EAT-26 scores. Sex was a significant predictor of SATAQ-3 score, but sport type was not. Both sex and sport type were not significant predictors of EAT-26 scores. **Conclusions:** Females are influenced more by the media with external factors and pressure. Future research should focus on educating female student-athletes on media and social factors, specifically targeting the items included in the SATAQ-3 questionnaire.

INTRODUCTION

- Female student-athletes in aesthetic sports (e.g. gymnastics, ballet, figure skating) were found to be at the highest risk for eating disorders (3).
- There are multiple classifications of eating disorder and they can affect persons of any age, weight, gender, and race/ethnicity (1).
- Types of eating disorder include: anorexia nervosa, bulimia nervosa, binge eating disorder, and eating disorders not otherwise specified (3).

PURPOSE AND HYPOTHESIS

The purpose of this study is to raise awareness of body image and disordered eating behaviors that may have gone unnoticed in an unexpected sport population. The hypothesis is that individual performance student-athletes will score lower on scales indicating body image and/or disordered eating behaviors when compared to student-athletes on team sports. We suspect, based off of population trends, that females will also score lower in the same categories compared to male student-athletes.

METHODS

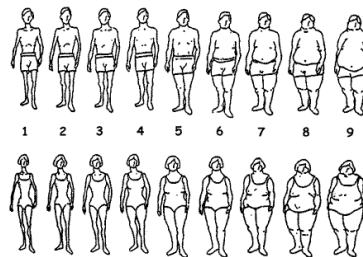
Subjects

- We recruited subjects to complete the Qualtrics questionnaire by e-mailing coaches of 22 collegiate teams at an institution in Midwest area for approval of student-athlete participation
- Out of 22 teams that were recruited, 16 coaches agreed to have their teams participate in the study.
- Participants were 17-23 years of age and involved in a NCAA Division III sport
- 88 participants volunteered to take survey, 68 completed
- Sports included football, volleyball, basketball, soccer, ice hockey, gymnastics, tennis, wrestling, cross country, and track and field
- Exclusion criteria: 20 dropped out or failed to answer questions
- Informed consent gathered according to IRB guidelines at UW-Eau Claire

Instrumentation

- Through the Institutional Online Survey, Qualtrics Survey Software, we combined three valid survey questionnaires designed to measure personal views on body image, eating disorder risk, and self-perceived BMI accuracy.
- The Sociocultural Attitudes Towards Appearance Scale-3 (SATAQ-3) reviewed four dimensions of media influence on awareness, internalization, pressures, and information
- The Eating Attitudes Test (EAT-26) is a valid and standardized self-report measure of symptoms and characteristics of eating disorders
- The Figural Stimuli BMI Silhouettes Survey is a scale involving sex-specific BMI figural stimuli silhouettes associated with Likert-type ratings of oneself against 9 silhouettes.
- Self report height and weight: Individual's height (inches) and weight (pounds) were reported subjectively in the Qualtrics survey.

Table 1: The Figural Stimuli BMI Silhouette Survey



Men:	1	2	3	4	5	6	7	8	9
BMI:	19.8	21.1	22.2	23.6	25.8	28.1	31.5	35.2	41.5
Women:	1	2	3	4	5	6	7	8	9
BMI:	18.3	19.3	20.9	23.1	26.2	29.9	34.3	38.6	45.4

Testing Procedure

- The athletics department administrative assistant sent out an email to the coaches that agreed to participate
- The email consisted of a letter describing the study protocol and a link to the website of Qualtrics Survey
- The participants were free to answer the questionnaire on their own time and wherever they felt comfortable.
- The questionnaire window was open for a total of two weeks

STATISTICAL ANALYSIS

- Data analyzed using IBM SPSS version 19.0
- Two-way ANOVA was used to examine the effects of sport type (individual performance vs. team sport) and sex (female vs. male) on EAT-26 and SATAQ-3 scores.
- Alpha level set at .05 to determine statistical significance

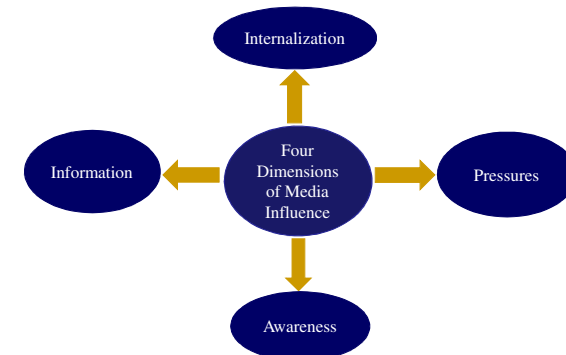
RESULTS

Table 2: Gender Cross Tabulation of BMI Silhouette Accuracy

	Correct BMI	Under BMI	Over BMI	Total Participants
Males	43.5%	39.1%	30.4%	23
Females	52.4%	21.4%	26.2%	42
Percentage of Total	47.1%	26.5%	26.5%	68

- A positive correlation existed between SATAQ-3 and EAT-26 scores, indicated that, the greater the sociocultural influence one had, the greater the unhealthy eating behaviors that one engaged in (p=.001)
- Factorial ANOVA indicated sex effect on SATAQ-3 scores (p = .011), there was no team vs individual difference observed (p=.450)
- No difference between male and female as well as between team and individual sports on SATAQ-3 and EAT-26 scores.

Sociocultural Attitudes towards Appearance Scale (SATAQ-3)



SUMMARY OF FINDINGS

- There is a positive correlation between social pressures and eating attitude tendency
- Females are influenced more by the media with external factors and pressures
- Future research should focus on educating female student-athletes on media and social factors, specifically targeting the items included in the SATAQ-3 questionnaire

ACKNOWLEDGMENTS

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