



Body Image and Disordered Eating Among UAF Female Athletes and Non-Athletes

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Introduction

- Disordered eating and poor body image is a problem in our society for many women
- Most eating disorder patients are young females, and female athletes may be particularly at risk
- Disordered eating is often associated with perfectionism, poor mental health, and other health-risk behaviors
- This research explored associations between eating behavior, body image, perfectionism, depression, binge drinking, and alcohol consequences in a sample of female athletes and non-athletes
- Analyses were conducted to determine differences in these variables between athletes and non-athletes, and between sports in the subsample of athletes

Method

Participants:

- 72 female UAF students
- 37 athletes
- 35 non-athletes
- Of the athletes, these sports were represented
- Basketball (27%; n = 10)
- Cross Country Running/Skiing (16.2%; n = 6)
- Swimming (21.6%; n = 8)
- Volleyball (35.1%; n = 13)
- 77.8% of the total sample was Caucasian
- Ages ranged from 18-31 (M = 20.83; SD = 2.71)

Procedures:

- All measures and methods were approved by the UAF IRB
- Inclusion criteria were being a female UAF student
- Recruitment included announcements at team meetings for athletes and flyers posted on campus for non-athletes
- Participants gave informed consent and then completed paper-and-pencil self-report questionnaires
- All participants were compensated \$20 for their time

Measures

- Perfectionism: Multidimensional Perfectionism Scale (MPS-F; Frost et al., 1990)
 - 35 items; possible range = 35-175; higher scores = greater perfectionism
- Disordered eating: Eating Attitudes Test (EAT26; Garner & Garfinkel, 1979)
 - 26 items; possible range = 0-78; higher scores = greater disordered eating behavior
- Sport-related attitudes: ATHLETE Questionnaire (Hinton & Kubas, 2005)
 - 39 items assessing 5 constructs: Drive for Thinness; Social Pressure on Eating; Performance Perfectionism; Social Pressure on Body Shape; and Team Trust
 - This measure was completed only by athletes
- Body image: Body Image Assessment Scale-Body Dimension (Gardner et al., 2009)
 - Participants are shown contour figure drawings of bodies ranging from 60% of normal size to 140% of normal size and are asked to identify the figure that most closely resembles their body and the figure that represents their ideal body. Greater discrepancy between the two figures represents greater body dissatisfaction
- Depression: Beck Depression Inventory-II (BDI-II; Beck et al., 1996)
 - 21 items; possible range = 0-63; higher scores = more depression
- Binge drinking: NIAAA Question Set (NIAAA; 2003)
 - Self-reported number of binge drinking days in a typical month in the past year, with "binge" defined as 4 or more standard drinks consumed in one sitting
- Alcohol-related consequences: Young Adult Alcohol Consequences Questionnaire (YAACQ; Read et al., 2006)
 - 49 items; possible range = 0-49; higher scores = more alcohol consequences

Results

- Overall, variables were correlated in the expected directions. There were some interesting differences in correlations between athletes and non-athletes.
- Poorer body image was associated with more disordered eating in athletes but not in non-athletes
 - There was a larger correlation between disordered eating and perfectionism among non-athletes than among athletes
 - Greater disordered eating was associated with greater alcohol-related consequences among athletes, but not among non-athletes
 - Poorer body image was associated with more frequent binge drinking and greater alcohol-related consequences among athletes but not among non-athletes
 - Greater alcohol consequences were associated with greater depression scores among athletes but not among non-athletes

Results Continued

Intercorrelations between Study Variables—Total Sample						
Variable	1	2	3	4	5	6
1. Perfectionism	--					
2. Disordered Eating	.45**	--				
3. Body Image	.10	.45**	--			
4. Depression	.56**	.44**	.42**	--		
5. Binge Drinking	.08	.32**	.27*	.23	--	
6. Alcohol Consequences	.16	.31*	.20	.32**	.64**	--

Note. *p < .05; **p < .01

Intercorrelations between Study Variables—Athletes						
Variable	1	2	3	4	5	6
1. Perfectionism	--					
2. Disordered Eating	.37*	--				
3. Body Image	.20	.72**	--			
4. Depression	.49**	.43**	.39*	--		
5. Binge Drinking	-.05	.28	.37*	.19	--	
6. Alcohol Consequences	.06	.40*	.40*	.40*	.73**	--

Note. *p < .05; **p < .01

Intercorrelations between Study Variables—Non-Athletes						
Variable	1	2	3	4	5	6
1. Perfectionism	--					
2. Disordered Eating	.54**	--				
3. Body Image	.09	.29	--			
4. Depression	.64**	.45**	.45**	--		
5. Binge Drinking	.23	.35	.19	.26	--	
6. Alcohol Consequences	.29	.22	.02	.24	.73**	--

Note. *p < .05; **p < .01

There were no differences between athletes and non-athletes in any of the variables; female athletes and female non-athletes had equivalent scores on all measures.

Table of Means and Standard Deviations				
Variable	Athletes		Non-Athletes	
	M(SD)	N	M(SD)	N
Perfectionism	88.00(2.60)	36	81.61(2.85)	32
Disordered Eating	10.84(1.74)	36	10.55(1.90)	32
Body Image	9.87(1.76)	37	12.49(1.86)	35
Depression	11.99(1.63)	37	11.79(1.72)	35
Binge Drinking	1.00(.41)	37	1.93(2.96)	35
Alcohol Consequences	7.03(1.53)	35	7.38(1.56)	34

Results Continued

- Differences between Type of Sport
- There were no significant differences between type of sport in perfectionism, disordered eating, body image, depression, or binge drinking
 - There was a significant difference in alcohol consequences between sports, however (F(1, 31) = 3.39, p < .05; partial η^2 = .25). Volleyball players reported significantly greater alcohol consequences than swimmers (12.54 vs. 0.13); there were no differences between any other groups

Discussion

- Being an athlete was neither protective nor a risk factor for disordered eating, poor body image, depression, perfectionism, binge drinking, or alcohol consequences
- The majority of women indicated that they wished they were smaller than they are
- In the overall sample, perfectionism was positively associated with disordered eating and depression; and disordered eating was associated with having poorer body image, greater depression, greater binge drinking, and greater alcohol consequences
- There were few differences between type of sport other than the finding that volleyball players reported greater alcohol consequences than swimmers

Implications

- Poor body image puts women at risk for disordered eating, depression, and binge drinking. Having a healthy body image is important for all women, regardless of weight or shape
- Coaches of female athletes should be aware of these associations, and should monitor athletes who seem to be high in perfectionism or depression for disordered eating
- Health professionals should be aware of the risk for poor body image, disordered eating, binge drinking, alcohol problems, and depression among all female students at UAF

Acknowledgments

Special thanks to the Undergraduate Research and Scholarly Activity program for funding this study, and to Angel Vasquez, Chris DeCou, and Omar Rutledge for their support and assistance