



# Preliminary Validation of the Portuguese Version of the Eating Inventory for Athletes

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INTRODUCTION

The field of eating disorders among athletes has recently been the focus of several publications, reflecting a growing field of interest and research (Dosil, 2008). Some sports demand a strict compliance to restrictive diets at different times of the competitive season, while others like, some types of gymnastics emphasize the thinness of the athletes. Hence there is a need to develop sound measures to evaluate the athletes eating habits and possible eating disorders. The Cuestionario de Hábitos Alimentarios del Deportista (CHAD), is one of these measures. It comprises 5 dimensions: i) Weight Gain Anxiety (e.g. If I eat too much I regret it afterwards; 12 items); ii) Body Image Worries (e.g., I'm always thinking about my body; 6 items,); iii) Irritability (e.g., If the coach speaks about weight matters, I feel anxious; 7 items); iv) Satisfaction/Dissatisfaction with Body Image (e.g., I'm satisfied with my appearance; 5 items); and v) Dieting (e.g., When the season ends, I keep practicing so that I don't gain weight, 4 items).

# **PURPOSE**

The aim of present study was the preliminary validation of the Portuguese version of the CHAD, a Spanish language inventory to measure athletes' eating behaviors.

# **METHODS**

### Subjects:

The sample gathered 150 subjects (age M=21.1; SD=5.1 y; 88 females) from different competitive sports (although 70% were gymnasts).

#### Instruments:

The CHAD is composed by 34 items evaluated with a 6 point Likert scale (1- Completely Disagree to 6 – Completely Agree). The original version measures 5 dimensions and was elaborated by Dosil and Dias (2002). The Social Physique Anxiety Scale (Hart et al, 1989), Body Image Assessment (Williamson et al, 1989), for females the Drive for Thinness subscale of the Eating Disorders Inventory - 2 (Garner et al, 1991) and for males the Drive for Muscularity Scale (McCReary & Sasse, 2000) were also used to gather data for the concurrent validation. In addition the assessment battery included demographic and body status self-reported items.

#### **Procedures:**

The harmonization method was the translation-retroversion supervised by a three-member jury. Factor analysis, internal consistency, correlations with additional body image constructs and comparative tests between genders were calculated

# **RESULTS**

Table 1. Mean, standard deviation and correlations with other constructs

	Weight Guin Anxiety	Body Image Worries	intability	Sethifaction	Dieting			
	Descriptives							
M	28.51	14.96	12.67	16.02	7.68			
SD	13.11	6.84	7.11	3.78	4.18			
	Correlations							
BMI	.08	.04	.05	.26**	.02			
Social Physique Arodety	.45***	.52***	.50***	.23**	.40***			
Body Size Dissafisfaction	A7***	.40****	.44***	.25**	.46***			
Drive for Thinness	.45***	.51***	.51***	.35***	.49***			
Drive for Muscularity	.12	.21	.03	10	.13			

#### References:

Dosil, J. y Díaz Fernandez, O. (2002). Valoración de la conducta alimentaria y de control del peso en practicantes de aeróbic. Revista de psicología del deporte, 11, 183-195.

Dosil, J. (2008). Eating Disorders in Athletes. Wiley-Interscience.

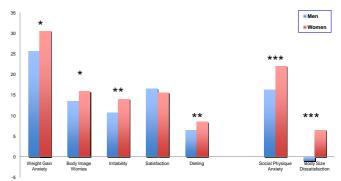
McCreary, D. R., & Sasse, D. K. (2000). An exploration of the drive for muscularity in adolescent boys and girls. J Am Coll Health, 48(6), 297-304.

Table 2. Exploratory Factor Analysis and Cronbach's Alpha

Item	Original factor	Irritability	Dieting	Body Image Worries	Weight Gain Anxiety	Satisfaction
chad24	Irritability	0.78				
chad19	Irritability	0.78				
chad16	Irritability	0.72				
chad29	Irritability	0.66		0.55		
chad5	Irritability	0.61				
chad14	Irritability	0.60		0.51		
chad8	Irritability	0.59				
chad23	Weight Gain Anxiety	0.48				
chad15	Dieting		0.76	1		
chad31	Weight Gain Anxiety		0.72	l .		
chad9	Dieting		0.71			
chad7	Weight Gain Anxiety	0.45	0.51			
chad25	Dieting		0.51	l .	0.47	
chad3	Dieting		0.48	l .		
chad21	Satisfaction		0.48	0.45		
chad27	Body Image Worries			0.74		
chad33	Body Image Worries			0.67		
chad11	Body Image Worries			0.66		
chad4	Body Image Worries			0.62		
chad17	Body Image Worries			0.51		
chad22	Body Image Worries		0.56	0.47		
chad13	Weight Gain Anxiety				0.78	
chad10	Weight Gain Anxiety				0.73	
chad18	Weight Gain Anxiety				0.60	
chad30	Weight Gain Anxiety				0.55	
chad26	Weight Gain Anxiety		0.50		0.52	
chad20	Weight Gain Anxiety				0.51	
chad2	Weight Gain Anxiety				0.50	
chad28	Weight Gain Anxiety		0.66		0.45	
chad32	Satisfaction					-0.72
chad12	Satisfaction					-0.70
chad6	Satisfaction					0.59
chad1	Satisfaction				0.48	0.49
chad34		did not load i	n any factor		70/07/07	
	Eigenvalue	16.16	2.33	1.40	1.28	1.19
	% Variance	47.53	6.85	4.10	3.76	3.49
	Cronbach's Alpha	0.92	0.84	0.87	0.92	0.79

Note: We forced the 5 factor structure of the original instrument and obtained a solution with 65.7% explained variance. We only present in this table the loadings higher than 0.32.

Figure 1. Gender comparisons



Note: T-test for independent samples. \*p<.05; \*\*p<.01; \*\*\*p<.001

# CONCLUSIONS

The results show that the preliminary version of the Portuguese CHAD is psychometrically sound, both in construct and concurrent validity. Further analysis should be conducted with confirmatory factor analysis and testretest procedures. This measure presented a promising tool for screening eating habits among athletes that should help the detection of athletes' maladjustments toward their eating behavior and body image.

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