



# BODY COMPOSITION AND BODY IMAGE PERCEPTION



## IN PORTUGUESE COLLEGE STUDENTS

Pereira E, Lacerda F, Valador N, Ferro-Lebres V

Superior Health School. Polytechnic Institute of Bragança, Portugal

E-mail address: inv\_dietetica@hotmail.com

### Introduction

Body image is the perception each one have, imagines or senses about his/her own body (Skrzypek *et al.* 2001).

Some population groups, particularly young women, are victims of social pressure imposed by an extreme slimness esthetic model (Stice *et al.* 2003).

### Aim

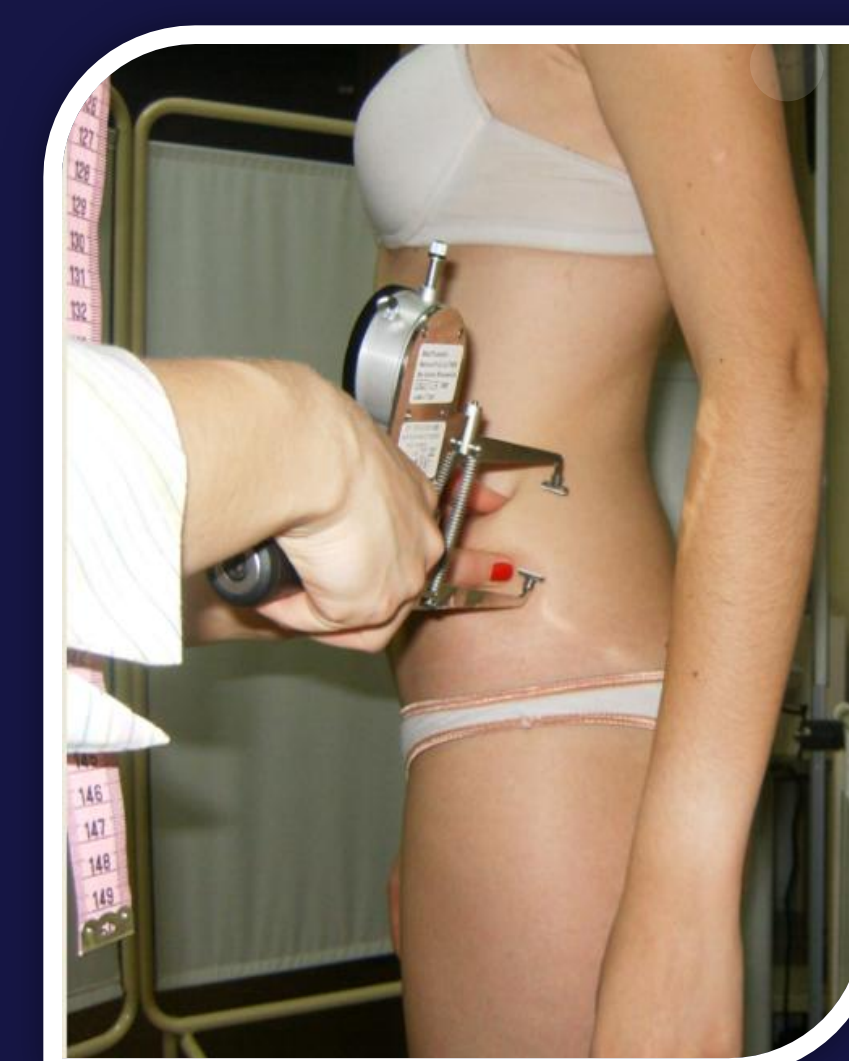
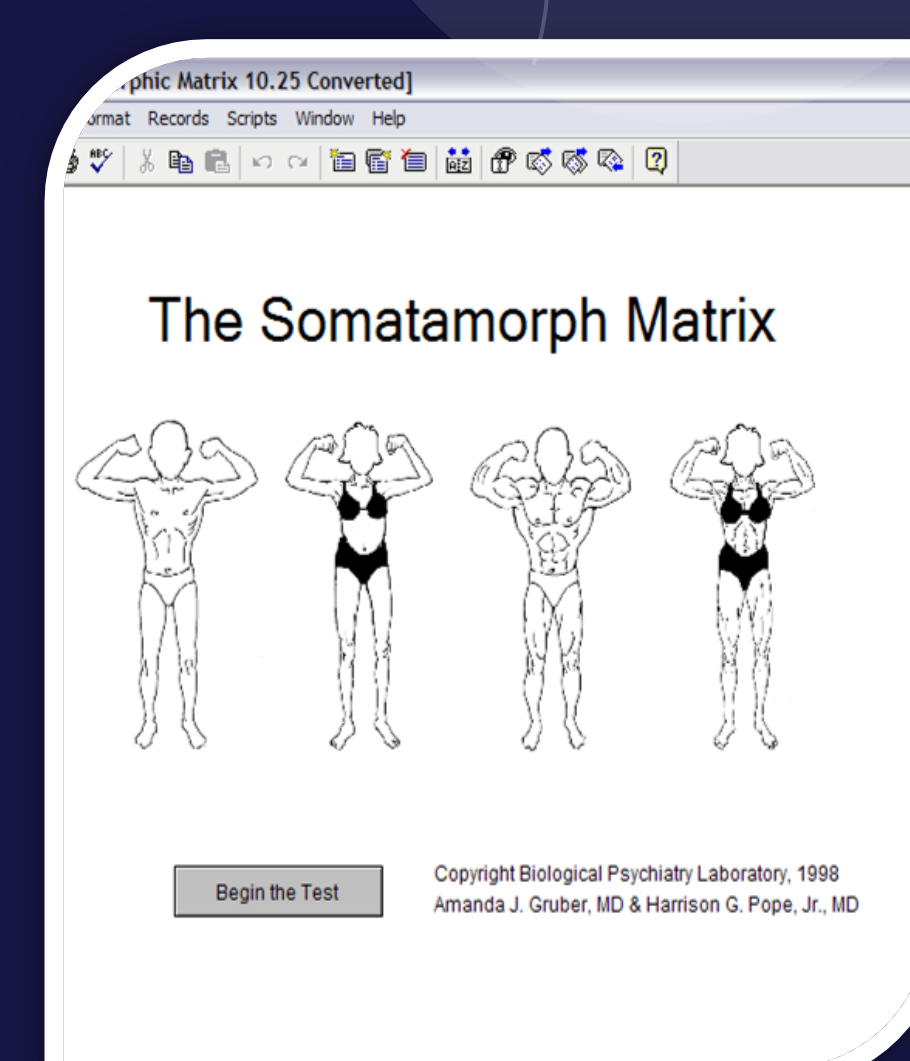
To compare body image dissatisfaction and perception with the real measures of body composition in a group of Portuguese women college students.

### Methods

• 102 college women students from the Bragança Polytechnic Institute, from different areas of knowledge (Education, Technology and Management, Agriculture, Health ).

• The directly estimated anthropometric measurement and the derived indexes were compared with reference values.

• The Body Image Perception and Body Image Dissatisfaction were estimated using the Somatomorphic Matrix (SM) and Body Shape Questionnaire (BSQ34). For data analysis it was used a t-test and Pearson correlation, by means of SPSS Vs15.0.



### Results

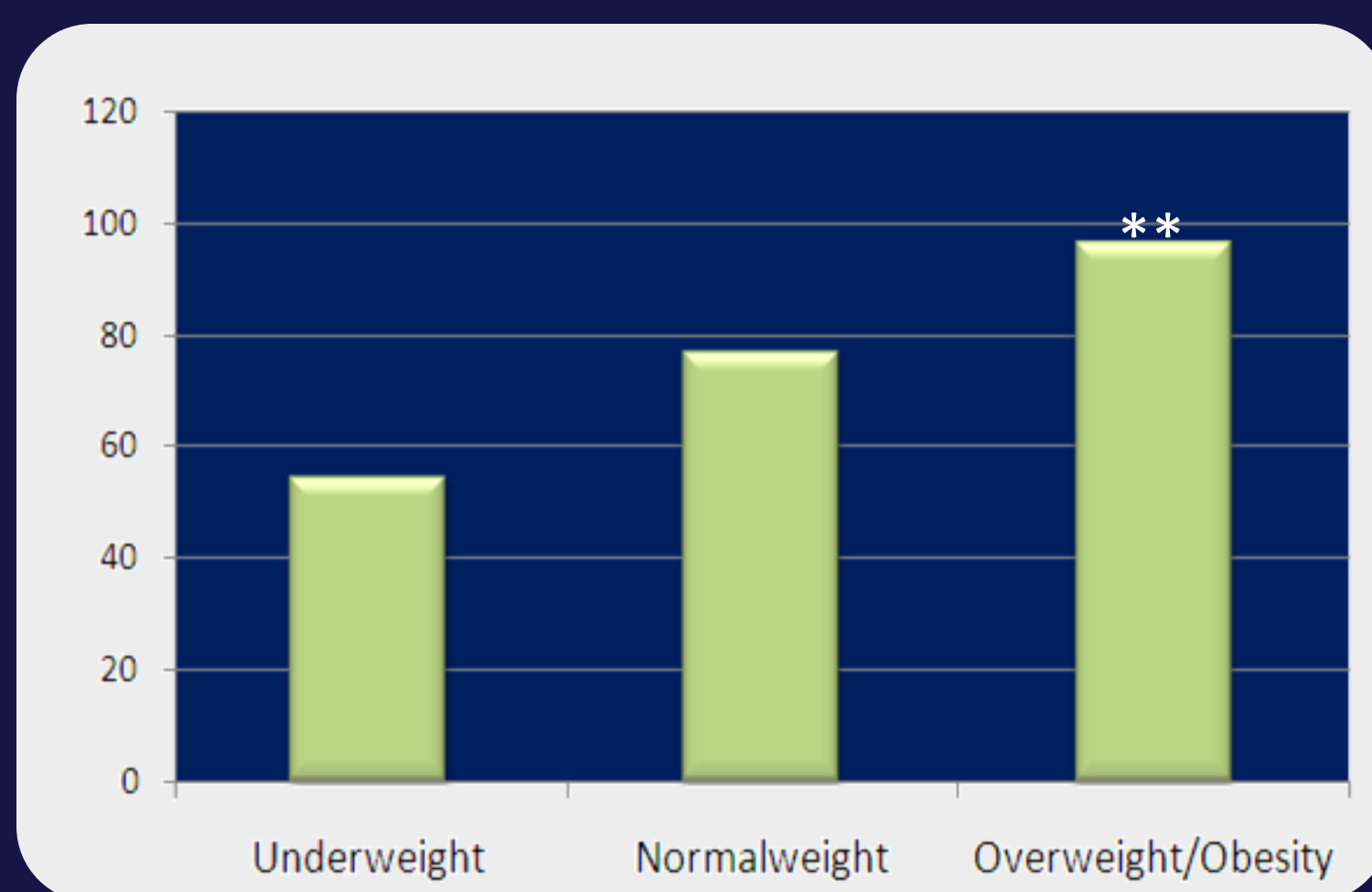


Figure 1 – BMI Classification According to BSQ Punctuation

| Dependent Variable | BMI Classification        | Mean Difference±SD |
|--------------------|---------------------------|--------------------|
| BF                 | Underweight (-4,80)       | -8,60 ± 2,38 **    |
|                    | Normalweight (3,80)       |                    |
| Dissatisfaction    | Underweight (-4,80)       | -12,47 ± 3,05 ***  |
|                    | Overweight/Obesity (7,67) |                    |

Table 1 – Differences in BF Dissatisfaction according to Real BMI

| Dependent Variable | BSQ 34 Classification     | Mean Difference±SD |
|--------------------|---------------------------|--------------------|
| BF                 | Not worried (0,72)        | -1,80 ± 0,35 ***   |
|                    | Slightly worried (2,53)   |                    |
| BMI                | Moderately worried (4,32) | -3,59 ± 0,51 ***   |
|                    | Slightly worried (2,53)   |                    |
| Dissatisfaction    | Moderately worried (4,32) | -1,79 ± 0,55 **    |
|                    | Moderately worried (4,32) |                    |

Table 3 – BMI Dissatisfaction according to Body Shape Concern

| Dependent Variable | BSQ 34 Classification      | Mean Difference±SD |
|--------------------|----------------------------|--------------------|
| FFMI               | Not worried (-1,15)        | -4,15 ± 1,43 *     |
|                    | Extremely worried (3,00)   |                    |
| Dissatisfaction    | Moderately worried (-1,65) | -4,65 ± 1,59 *     |
|                    | Extremely worried (3,00)   |                    |

Table 2 – FFMI Dissatisfaction according to Body Shape Concern

There were **No Significant Differences** found between:

- FFMI Perception and Dissatisfaction and BF Perception according to real BMI
- BMI Perception, BF Perception and Dissatisfaction according to Body Shape Concern
- Areas of Knowledge

#### LEGEND:

BF, body fat; FFMI, fat-free mass index; **Actual image**, which better represents her body; **Ideal image**, which represents the desired ideal body; **Average image**, which represents the average kind of body on women with her age; **Attractive Image**, which represents the man's most desired female body;

\*P<0,05; \*\*P<0,01; \*\*\*P<0,001



### Conclusion

•The women either with low weight or with overweight/obesity, badly perceived their BMI. Those with low weight believed that they had more weight and the others less than what they had in fact, respectively.

•No significant differences were found between areas of Knowledge. Possibly, there are other factors with a greater influence than Knowledge.

• More than evaluate body image perception, this study, emphasize the importance of delineating strategies that permit health professionals to empower the youth to avoid a wrong individual body image perception induced by the excessive mass media messages.

• Additional research is needed to understand the reasons why women feel displeased with their body image.

• It would be interesting to investigate body image perception and dissatisfaction in other cultures and religions so it could be compared.

### References

Skrzypek, S., Wehmeier, P.M., Remschmidt, H. (2001). Body image assessment using body size estimation in recent studies on anorexia nervosa. A brief review. *European Child & Adolescent Psychiatry*, 10(4), 215-221; Stice, E., Trost, A., & Chase, A. (2003). Healthy weight control and dissonance-based eating disorder prevention programs: Results from a Controlled Trial. *International Journal of Eating Disorders*, 33, 10-21; Pope H.G. Jr., Phillips K.A., Olivardia, R.(2000). *The Adonis Complex: The Secret Crisis of Male Body Obsession*. New York, Free Press; *Governo Vasco* (1994).

**Acknowledgments:** Authors express their gratitude to Artur Vieira (Translator) and Serviços de Acção Social - IPB for the collaboration.