

## Obesity Fitness Expo 2017: Body mass index and body fat in college age males and females: Perception versus reality-Lynn Romejko Jacobs-Southern Methodist University, USA

Lynn Romejko Jacobs

Southern Methodist University, USA

**Objective:** This study's purpose is advancing knowledge about perceptions of healthy body fat and BMI among undergraduate students, examining the relationship between believed and actual body characteristics. **Participants:** In September 2009, 413 freshmen completed a survey asking students to self-assess body fat percentage, BMI and weight among other questions. **Methods:** Students were surveyed prior to and after taking body measurements. Regression was used to understand how different categories predicted level of accuracy in students' assessments. **Results:** Findings suggest students less accurately estimated BMI than body fat percentage. Interactions suggest females and males differ in estimation accuracy and this varied by fat categories. Additionally, 90% of students believed body fat percentage easier to understand than BMI. **Conclusions:** Since body fat percentage was significantly better understood, this measurement should be used to educate individuals on healthy weight and body composition status on a wider scale. The prevalence of obesity is increasing worldwide and is linked to poor perception of body image. The purpose of this study was to identify the relationships between body image (BI) and body mass index (BMI) with weight control practices among university students. A cross-sectional study on a sample of 308 university students (150 men and 158 women) aged 18 to 25 was carried out. Face-to-face interviews were conducted based on a questionnaire that included socio-demographic, physical

activity, figure rating scale (FRS) and dissatisfaction with body image (IDB). The majority of participants (81%: 58.2% women and 41.8% men) were dissatisfied with their BI. Women wanted to lose weight and preferred to diet for exercise, while men wanted to gain weight and preferred to exercise for diet ( $p < 0.001$ ). About 56%, 39.5% and 4.5% of participants were normal, overweight / obese and underweight, respectively. There was a significant significant correlation ( $R^2 = 0.84$ ,  $p < 0.001$ ) between the perceived BMI and the actual BMI. Actual BMI showed a significant significant correlation with BID ( $r = 0.57$ ,  $p < 0.001$ ). The results underscored the need to raise awareness of the importance of healthy eating behaviors and regular physical activities to improve body size, fitness perception and satisfaction for college men and women. Several limitations of this study were recognized, such as the small sample size, which may not be representative of the entire population and limits generalizability. In addition, self-reported data may contain several potential sources of recall bias, which could affect the accuracy of our results. A limitation of the short form of the IPAQ questionnaire is that it tends to overestimate physical activity levels compared to some other questionnaires and the long version of the IPAC. As a cross-sectional study, the results are correlations, not causalities, with the inability to decide the direction of the effects.