118 - BODY IMAGE PERCEPTION IN UNDERGRADUATE STUDENTS PRACTISING STRENGTH TRAINING

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INTRODUCTION

Gymns offering strength training modality have increasingly been gathering young people.

Strength training is the most common term used to designate training with weights, referring to its most evident effect which is the increase in muscle mass (SANTARÉM, 1995). According to Godoy (1994), strength training can be defined as a physical activity developed through analytical exercises, using progressive resistances provided by material resources such as: barbells, dumbbells, leg bands, expanders, modules, the body itself and/or its segments, weighted pieces and others.

Fleck and Kraemer (1999) highlight that the increase in muscle mass and muscle endurance, the decrease in injury for sports and recreational activities, the increase in performance capacity for sports and recreational activities, better postural control, improvement in biochemical conditions and body composition.

However, aesthetics seems to be the main reason for adolescents to demand exercises with weights (CAMOPOS, 2002).

The aesthetic and athletic results youngsters long to reach through strength training are not associated only to training aspects, being influenced by genotype factors (individual) and phenotype ones (environment) (SANTARÉM, 1995). In these terms, acting professionals (teachers and instructors) should be attentive regarding youngsters awareness on individual possibilities and limits, an action which may prevent youngsters from using illicit ergogenic resources (steroids, anabolic products, for example).

The effect media has on body image pressures part of our society into seeking attractive bodies, the body industry thus profit through communication sources, a mean to create, reinforce and patter bodies (RUSSO, 2005).

Body image is an individual representation since one's birth until one's death. Therefore, during one's life, as greater the stimulus are the greater the possibilities for new experiences will be, the body scene will be more complete, mainly in the psychomotor aspect. Adolescence and adult life carries loads of previous body experiences, the form can be polished though the initial building elements are preserved despite transformation occurred through one's lifetime. The body scheme is slowly formed, being developed before birth and notably increased since then until the third year of life. Through one's evolution the body scheme is adaptatively formed as time goes by (BARRETO, 2002, apud MATARUNA, 2004).

There is a greater incidence in body image distortion in groups which choose to constantly work on their bodies (KAKESHITA; ALMEIDA, 2006).

Regarding young male adolescents training, the high intensity and the great amount of trainings can cause an appreciation of idealized body image to be achieved at any cost.

Federici (2004) verified that positive transformations in peoples' body image after they attended a physical activities program trusting the widely recognized benefits of a physical activities practicing and the relevance of the body image reconstruction movement. The systematic physical activity aiming to body experimentation and individual autonomy may enable improvements in body image perception, since other than providing a greater comprehension on physiological, psychological and social individualities, it also through body experiences that we can acquire new mental representations that are added to the old ones, developing a whole body image which enables us to positively reconstruct and adapt our bodies into the society we live in.

Reaching the “perfect” body fosters beauty patterns which tend to take the extreme limit of this obsessive pursuit thus distorting the borderline between what is healthy body care and the subtle egocentric diseases installment (ANDRADE; BOSI, 2003).

The overvaluation of body image and the frenetic pursuit of beauty patterns and idealized images – reinforced by the media – may unleash eating disorders (FISBERG, 2000). The onset of eating disorders often occurs in adolescence due to how youngsters worry about their new body and new weight, demanding a renewal to body image (ALVES et al, 2008).

The relationship between self body image and disorders is great and of extreme relevance to be analyzed regarding its risks to the development of such issues.

Among the instruments of perceptual aspects in the subjective aspect is the Body Shape Questionnaire (BSQ), developed by Cooper et al. (1987), which measures the level of concern about body shape, self-deprecation due to physical appearance, and it was translated by Cordás and Neves (1999) and validated for a population of Brazilian undergraduate students by Di Pietro (2002).

As a reason for our study we understand that body self-image is the way people see themselves before a group of individuals and how they imagine to be seen by society. In some cases where the psychologist is influenced by great media advertising on the attempt of having the perfect body, which is not always similar as having a healthy body, the individual may be led into seek a series of methods – including drugs – in order to reach the perfect body prototype, even when opposed to a healthy one.

This strong tendency of worshiping the perfect body makes people who used to practice intensive physical activities able to almost reach more easily a prototype of the desired body. In turn, the BMI (Body Mass Index) is a superficial instrument to measure the body fat level (through body weight and height) and may be a way to overestimate height and decrease weight, for example, when someone is questioned.

Bearing in mind that peoples' tendency is to change their anthropometric measures it is necessary to verify and to diagnose to understand when a possible distortion of the way youngsters see themselves may affect their lives. We hope that the results of this research provide relevant information on how body overvaluation may be distorted and if the group analyzed may present distortions.

METHODOLOGY

The study was carried out at a strenght-training gym in Maringá – PR, where many undergraduate students attend, with 37 male youngsters who practices strength-training at the age of 17 to 25 years old.

The research was carried out with the allowance of the gym directors. Following the research development process the initial project was sent to the Ethics Committee and Research on Human Beings of State University of Maringa, and after being approved we initiate the data collection. The population was evaluated after filling an appropriate Inform Consent Form. The personal identity of all participants was kept confidential, as well as personal data. Initially the researchers informed the individuals on how the procedure would take place and answered doubts concerning the research. The sample was aware that would not be submit to any invasive procedures, that no personal embarrassment would occur and that the use of data from the procedure would exclusively be for scientific and didactic endings.

We assessed the antropometric measures: weight, height and skin fold thickness. The assessed skin folds were biceps, triceps, abdominal, pectoral, subscapularis, suprailiac, medial thigh, calf. The weight was assessed with a Filizola scale with 100g accuracy and height through vertical meter with 1mm accuracy and skin fold thickness was assessed using a Cescorf scientific compass. These data were used to estimate the body mass index (BMI) and body fat percentage (%G).

At the final stage of the antropometric data collecting we applied the, Body Shape Questionnaire, adapted to male strength-training practitioners. The instrument contains 32 (thirty-two) questions with six possible answers: 1-never; 2-rarely; 3-sometimes; 4-frequently; 5-much frequently and 6-always. The BSQ results classification is divided into four body self-image distortion levels. Score under 80 indicates the absence of distortion; score between 80 and 110 indicates soft distortion, score between 110 and 140 indicates moderate distortion and score equal to or over 140 indicates severe body self-image distortion (DI PIETRO, 2002).

The qualitative variables will be presented through tables and graphs with percentage values; we will use the descriptive statistics to analyze the quantitative dada which will be presented as mean ± standard deviation, and we will use the t Student test to establish a comparison between averages adopting a significance level of $p<0,05$.

RESULTS

The study sample was composed of 37 male undergraduate students who practice strength-training at the age of 17 to 25 years old. The data collecting was carried out at a strength-training gym in Maringá – PR.

Table 1. Description of the sample presented in Mean ± standard deviation (SD) regarding age, average score acquired from BSQ and antropometric characteristics.

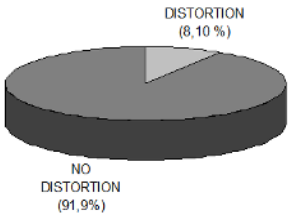
	Idade	BSQ	Peso	Estatura	IMC	% Gord.
Average	22,35	58,54	74,30	1,76	23,85	21,91
DP	± 3,27	± 14,26	± 10,37	± 0,06	± 2,71	± 5,65

Table 1 presents a description of the sample regarding age, average score for BSQ and antropometric characteristics. The average age of undergraduate students 22.23 (±3.27), the weight 74.30 (±10,37), the height 1,76 (±0,06), the BMI 23,85 (± 2,71), the fat percentage 21,91 (±5,65) e BSQ 58,54 (±14,26).

According to Pope et al. (1997) youngsters are increasingly worrying about their physical appearance and may develop a body self image distortion and adopt inappropriate diets and excessive exercises practicing. This distorted image tends to lead these individuals into seek strength-training exercises as a “correction” to their issues.

Analyzing BSQ the average score for undergraduate students who practice strength-training was of 58,54 (±14,26),, which classifies the sample as regular and with absence of body image distortion opposing to some researches.

Graph 1. Distribution of strength-training practitioners regarding self-image perception



The self-image distortion presented in Graph 1 (8.10%) is considered to be low if compared to what is presented in studies on female practitioners (BOSI et al., 2006; SILVA, 2007; GONÇALVES et al., 2008; ALVARENGA, 2010). Additionally to this statement studies by Gillini and Gillini (1998) and Fernandes (2007) highlight that self-image distortion is more common for female adolescents and youngsters when compared to male adolescents and youngsters, mainly due to the fear of obesity and unacceptability of their own bodies which can be associated to low self-steam, inferiority and rejection cases. There are thus indicatives which point to the increase of social-cultural pressure to be thin if you're a woman, spread through the media (STICE; WHITENTON, 2002).

Additionally to the comparison with others female samples it is necessary to analyze that the results point to the sample BMI average and the Fat Percentage within the patterns of regularity, that is, the participants presented an average of body composition which indicates eutrophy. Coqueiro et al. (2008) states that the relationship between the dissatisfaction with body image and the nutritional state that the individual presents hasn't have an understanding yet, bearing in mind that literature reports the incidence of high prevalence of this dissatisfaction both in overweighed and obese individuals and in individuals with appropriate body mass or even underweight. Therefore, for the present sample the fact that the average BMI and Fat Percentage are not observed in overweighed or high fat percentage individuals may be a determining factor in the absence of body self-image distortion.

CONCLUSION

We conclude from the present study that male young people who practice strength-training present no body self-image distortion. This fact may be due to the antropometric variables which indicate that the individuals are usually in eutrophy. However, it is necessary to consider that the relationships with the body are currently influenced by several social-cultural and psychological factors which may lead both men and women to present concerns and dissatisfaction about their body image, making us more aware about the maintenance of good physical shape.

Finally, the data do not present the sample as likely to develop body self-image issues, but other studies show a high incidence of people suffering from this sort of dissatisfaction. However, it is of great relevance that others studies are carried out in order to diagnose theses issues not only in populations considered to be risky but also in groups exposed to the daily pressure exerted by the media and that in spite of being greatly taken for granted by some studies can be a mirror to the severity of the issue.

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BODY IMAGE PERCEPTION IN UNDERGRADUATE STUDENTS PRACTISING STRENGTH TRAINING
ABSTRACT

The aim of this study is to verify the body image perception in male undergraduate students who practice strength-training and the relationship of it with the data acquired from the antropometric evaluation. The sample was composed of 37 male undergraduate students who practice strength-training at the age of 17 to 25 years old. The data collecting was carried out at a strength-training gym at Maringá – PR. We assessed the antropometric measures: weight, height and skin folds thickness in order to determine the fat percentage and BMI. At the final antropometric data collecting stage we applied the BSQ, Body Shape Questionnaire, adapted to male strength-training practitioners. We concluded that male youngsters do not present body self-image distortion, which can be associated to the antropometric variables indicating that the individuals are usually in eutrophy.

KEY WORDS: self-image, young undergraduate students, strength-training

PERCEPTION DE L'UNIVERSITÉ LES BODYBUILDERS IMAGE DE SOI
RÉSUMÉ

Le but de cette étude était d'étudier la perception de l'image corporelle chez les étudiants masculins culturistes et les relations similaires avec les données obtenues avec les mesures anthropométriques. L'échantillon se composait de bodybuilders universitaires 37, masculins âgés de 17 à 25 ans. La collecte des données a été faite une salle de musculation dans la ville de Maringá - PR. Les mesures anthropométriques ont été mesurés le poids, la hauteur et l'épaisseur des plis cutanés, pour déterminer le pourcentage de graisse corporelle et BMI. A la fin de l'été appliqué données anthropométriques BSQ, Questionnaire image corporelle, adaptée pour les culturistes masculins. Il a été conclu que les jeunes n'ont pas de distorsion de l'image corporelle. Ce fait peut être lié à des variables anthropométriques qui a indiqué que sur les individus en moyenne sont eutrophes.

MOTS CLEFS: image de soi des étudiants universitaires, les bodybuilders.

PERCEPCIÓN DE AUTO-IMAGEN EN UNIVERSITÁRIOS PLATICANTES DE MUSCULACIÓN
RESUMEN

Lo objetivo del estudo fue verificar la percepción de imagem corporal em estudiantes universitários de lo sexo masculino platicantes de musculación y la relacción de la misma con los dados obtidos en la avaliación antropométrica. La amostra foi compuesta por 37 universitários platicantes de musculación, de lo sexo masculino de idad entre 17 a 25 años. La coleta de dados foi realizada en uno ginásio de musculación de la ciudad de Maringá – PR. Fueran aferidas las medidas antropométricas peso, estatura y espessura de las dobras cutâneas, para se determinar lo percentual de gordura e IMC. Em lo final de la coleta de dados antropométricos fue aplicado lo BSQ, Questionário de Imagen Corporal, adaptado para platicantes de musculación de lo sexo masculino. Concluiu-se que los jovenes no apresentarón distorción de la auto-imagen corporal. Esse fato puede estar relacionado com las variaveles antropométricas que indicaram que en média los indivíduos se encontran en eutrofia.

PALABRAS CLAVE: auto-imagen, jovenes universitários, musculación.

PERCEPÇÃO DE AUTO-IMAGEM EM UNIVERSITÁRIOS PRATICANTES DE MUSCULAÇÃO
RESUMO

O objetivo do estudo foi verificar a percepção de imagem corporal em estudantes universitários do sexo masculino praticantes de musculação e a relação da mesma com os dados obtidos com a avaliação antropométrica. A amostra foi composta por 37 universitários praticantes de musculação, do sexo masculino de idade entre 17 a 25 anos. A coleta de dados foi realizada uma academia de musculação da cidade de Maringá – PR. Foram aferidas as medidas antropométricas peso, estatura e espessura das dobras cutâneas, para se determinar percentual de gordura e IMC. Ao final da coleta de dados antropométricos foi aplicado o BSQ, Questionário de Imagem Corporal, adaptado para praticantes de musculação do sexo masculino. Concluiu-se que os jovens não apresentam distorção da auto-imagem corporal. Esse fato pode estar relacionado com as variáveis antropométricas que indicaram que em média os indivíduos se encontram em eutrofia.

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