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# Perceived Physical Self-Concept in University Students Comparisons by Gender

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**Abstract:** The aim of the present study was to compare the profiles of physical self-concept between men and women Mexican university students. A total sample of 789 participants, 399 women and 390 men, aged 18-36 years participated in this study. A quantitative approach with a descriptive and transversal survey design was used. All the participants completed the Physical Self-Concept Questionnaire of A. Goñi, Ruiz de Azúa, and Rodríguez [12]. The results of the one-way multivariate analysis of variance, followed by the one-way univariate analyses of variance, showed that compared with the women, the men obtained higher scores on the subscales physical ability, physical fitness, physical attractiveness, strength, general physical self-concept, and global self-concept. Because of the differences between men and women in their perception of physical self-concept found, these findings suggest that in order to design any intervention for improving the perceived physical self-concept of the students, the variable gender should be taken into account.

**Keywords:** Physical Self-Concept, Student's Beliefs, Gender Differences, Self-Perception

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## 1. Introduction

Self-concept is one of the most important findings in the field of motivational research, that's why psychology has always given preference attention to self-concept; considering it as an important predictor of behavior, emotional and cognitive outcomes of people [1].

Self-concept plays a crucial and central role in the development of the personality, as noted in the main psychological theories; a positive self-concept is the basis of good personal, social and professional functioning, depending on it, largely, the personal satisfaction, and feeling good about yourself. Therefore achieving a positive self-concept is one of the objectives pursued in numerous psychological intervention programs (educational, clinical, community, civic...) for which are demanded strategies and resources to improve it [2].

In recent years, modern societies have given excessive value to the body image producing exaggerated concerns about body weight, that although today is considered aesthetic is not necessarily healthy, and this can have

negative consequences, which can be expressed as body dissatisfaction, valued as the degree to which individuals value or despise your body and/or distortion of body image, which is the imprecision in determining body size [3].

Practically the entire studies made by different authors, obtain differences according to gender finding that the physical self-concept of women is significantly lower than of men [4-7]; one possible explanation is the fact that there is a process of socialization in practice of physical activity, as occurs in other areas of development, in which there is a stereotype according to which men are encouraged to participate especially in competitive sports where they have the opportunity to develop certain physical skills to a greater extent than women [8, 9].

This research is primarily a descriptive study that attempts to compare the profiles of physical self-concept of men and women Mexican university students; taking into account that in recent years the physical self-concept has taken a huge boom in modern societies, many of which have created a whole subculture based on the perception and the importance of the ideal image [10].

Consequently this research aims, as an applied research,

provide information that translates into a higher quality educational practice in the context of attention to diversity; contributing to pedagogical knowledge that clarifies the factors that make a model of integral human development.

## 2. Method

### 2.1. Participants

The sample of 789 participants, 399 (50.6%) women and 390 (49.4%) men, all students of the Faculty of Physical Culture (FCCF) of the Autonomous University of Chihuahua (UACH).

Women ages range between 18 and 33 years, with a mean of

### 2.3. Instrument

20.34 and a standard deviation of 2.09 years; and men fluctuate between 18 and 36 years, with a mean of 21.23 and a standard deviation of 2.65 years.

The sample was obtained by convenience sampling, trying to cover the representation of the different semesters of the degrees offered in the FCCF.

### 2.2. Design

Regarding the design of the study, a quantitative approach with a descriptive and transversal survey design was used [11]. The independent variable was gender (women and men) and the dependent variables were the scores on physical self-concept.

*Figure 1. Example of response to the questionnaire items.*

Physical Self-Concept Questionnaire of Goñi et al. [12]. Composed of 36 items grouped into six dimensions: (a) physical ability ( $\alpha = 0.84$ ), consisting of items 1, 6, 17, 23, 28, and 33. These items express ideas like (“I do not have qualities for sports”) or (“I consider myself clumsy at sports”); (b) physical fitness ( $\alpha = 0.88$ ), composed of items 2, 7, 11, 18, 24, and 29, expressing ideas such as (“I have much physical energy”) or (“I can run and do exercise for a long time without experiencing fatigue”); (c) physical attractiveness ( $\alpha = 0.87$ ), groups the items 8, 12, 19, 25, 30, and 34, and has expressions like (“It is difficult for me to have good self image”) or (“I feel confidence regarding the physical image that I transmit”); (d) strength ( $\alpha = 0.83$ ), consists of items 3, 9, 13, 20, 31, and 35, and express ideas like (“I am able to realize activities that require strength”) or (“I am strong”); (e) general physical self-concept ( $\alpha = 0.86$ ), is composed of items 4, 14, 16, 21, 26, and 36, and expresses ideas like (“I feel that I am physically worse than the others”) or (“Physically, I feel good”); and (e)

global self-concept ( $\alpha = 0.84$ ), composed of items 5, 10, 15, 22, 27, and 32, and expresses ideas such as (“I feel happy”) or (“I wish I was different”) [12].

For our study two adaptations to the original version of Goñi et al. were made:

The first adaptation was to change some terms used in the items of the original version in order to use a language appropriate to the context of the Mexican culture.

The second adaptation was to apply the instrument through a computer; this in order to allow storage of data without prior encoding stages, with greater precision and speed (Figure 1).

### 2.4. Procedure

Once obtained the permission of the corresponding educational authorities, were invited to participate in the study students of the Degrees in Human Motricity and Physical Education of the Autonomous University of Chihuahua (UACH).

Those who agreed to participate signed the consent letter. Then the instrument was applied using a personal computer, in a session of about 30 minutes; in the computer labs of the Faculty of Sciences of Physical Culture of the UACH.

At the end of the session students were thanked for their participation.

At the beginning of each session students were given a brief introduction on the importance of the study and how to access the instrument; instructions of how to answer were on the first computer screens, before the first instrument item.

At the end of the session students were thanked for their contribution to the study.

Once the instrument was applied, data was collected by the results generator module of scales editor, version 2.0 [13].

### 2.5. Data Analysis

Descriptive statistics (means and standard deviations) for all the variables were calculated. Subsequently, after verifying that the data met the assumptions of parametric statistical analyses, a one-way multivariate analysis of variance (MANOVA), followed by the one-way univariate analysis of variance (ANOVA), were used to examine the differences

between the men and women on the reported physical self-concept scores. Moreover, the effect size was estimated using the eta-squared ( $\eta^2$ ). All statistical analyses were performed using the SPSS version 20.0 for Windows (IBM® SPSS® Statistics 20). The statistical significance level was set at  $p < 0.05$ .

## 3. Results

Table 1 shows the mean values and standard deviations of self-efficacy in the five factors of AUDIM, as well the MANOVA results and subsequent ANOVAs.

MANOVA results showed statistically significant global differences according to the gender variable in physical self-concept scores (Wilks  $\lambda = 0.772$ ,  $p < 0.001$ ;  $\eta^2 = 0.228$ ).

Subsequently, the ANOVAs indicated that, compared with the female students, male students show higher scores in all subscales of physical ability ( $F = 134.732$ ,  $p < 0.001$ ), physical fitness ( $F = 140.538$ ,  $p < 0.001$ ), physical attractiveness ( $F = 7.209$ ,  $p < 0.01$ ), strength ( $F = 122.188$ ,  $p < 0.001$ ), general physical self-concept ( $F = 44.068$ ,  $p < 0.001$ ) y global self-concept ( $F = 24.033$ ,  $p < 0.001$ )

*Table 1. Results of MANOVA for the gender differences on the eleven subscales of physical self-concept.*

	Women (n = 399)	Men (n = 390)	F	p	$\eta^2$
physical ability	2.21 (0.66)	2.70 (0.49)	38.465	<0.001	0.228
physical fitness	2.16 (0.84)	2.84 (0.76)	134.732	<0.001	0.146
physical attractiveness	2.92 (0.95)	3.09 (0.74)	140.538	<0.001	0.152
strength	2.21 (0.77)	2.79 (0.70)	7.209	<0.01	0.009
general physical self-concept	2.95 (0.90)	3.33 (0.66)	122.188	<0.001	0.134
global self-concept	3.11 (0.73)	3.34 (0.56)	44.068	<0.001	0.053
			24.033	<0.001	0.030

Note. Descriptive values are reported as mean (standard deviation).

## 4. Discussion and Conclusions

The obtained results show that in all areas or factors of physical self-concept, men are perceived better than women; what can be concluded that women show a less developed physical self-concept; this conclusion is consistent with similar studies [4, 6, 8] also reports that women tend to have lower levels of physical self-concept than men; and predisposes women to a greater risk of developing eating disorders, because it has been found that people with a poor physical self-concept are more vulnerable to cultural pressure for a slimmer body [9, 14, 15].

This results can be explained on the basis that, for reasons of gender stereotypes in the Western culture, men have more opportunities to develop their physical skills and therefore improve their physical self-concept to a greater extent than women [16, 17]. In other words, the socialization process by encouraging certain ways of thinking, feeling and acting depending on whether it is male or female, promotes gender identity; which explains the development of different beliefs between men and women [4].

Analyzed data also point at women being more susceptible victims of a sociocultural pressure promoting a far from real

beauty canon via media, family, and life partners, as shown by Englera, Crowtherb, Daltonb and Sanftner [18], Rodriguez, Oudhof, Gonzalez-Arratia and Unikel-Santoncini [19], and Jáuregui and Bolaños [20].

The differences found between men and women regarding their physical self-concept, also suggest, that when designing any kind of intervention that aims to improve the self-concept, the gender variable should be taken into account. It is emphasized the importance of conducting more research on the subject in our country.

At least two limitations are present in this work. The first is that participants are only Mexican university students, which threatens the possibility of generalizing these results. Expand the sample (for example adding young adults who are not students) is a work area for the future. The second limitation comes from the measuring instrument itself, which is based on self-inform and therefore may contain biases that result from social desirability.

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