

Drive for thinness and pursuit of muscularity: the role of gender ideologies*

Impulso a la delgadez y búsqueda de la muscularidad: el rol de las ideologías de género

Recibido: 10 de junio de 2013 | Aceptado: 23 de junio de 2016

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ABSTRACT

The female sociocultural beauty ideal is ultra-thin, while the male beauty ideal is related with a muscular body. In this paper it is argued that these differences may be explained by the gender ideology that men and women have. Data obtained from 615 female students (with a Body Mass Index between 18 and 30) revealed that participants high in a gender ideology scale reported greater drive for thinness and less pursuit of muscularity. In addition, women with low scores in a gender ideology scale showed the opposite pattern: high scores on pursuit of muscularity and low in drive for thinness. Finally, it is discussed why men and women adopt different strategies to deal with these beauty ideals.

Keywords

Body Mass Index; disordered eating; drive for thinness; gender ideology; pursuit of muscularity

RESUMEN

El ideal sociocultural femenino es ultra delgado, mientras que el ideal masculino tiene que ver con tener un cuerpo musculado. En este artículo se argumenta que estas diferencias pueden ser explicadas por las ideologías de género que tienen hombres y mujeres. Los datos obtenidos de 615 mujeres estudiantes (con un Índice de Masa Corporal entre 18 y 30) mostraron que las participantes altas en una escala de ideología de género informaban de un mayor impulso a la delgadez y menos búsqueda de la muscularidad. Además, las mujeres con marcadores bajos en una escala de ideología de género mostraban el patrón opuesto: puntuaciones altas de búsqueda de la muscularidad y bajas en impulso a la delgadez. Finalmente, se discute porqué hombres y mujeres adoptan diferentes estrategias para lidiar con estos ideales de belleza.

Palabras clave

búsqueda de la muscularidad; ideología de género; impulso a la delgadez; Índice de Masa Corporal; problemas alimentarios

doi: 10.11144/Javeriana.upsy15-2.dtpm

Para citar este artículo: Magallares, A. (2016). Drive for thinness and pursuit of muscularity: the role of gender ideologies. *Universitas Psychologica*, 15(2), 353-360. <http://dx.doi.org/10.11144/Javeriana.upsy15-2.dtpm>

* Artículo de investigación científica y tecnológica.

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Introduction

In Western cultures there is a great emphasis on physical appearance as a determinant of people's personal value (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). According to these authors, the female sociocultural beauty ideal is ultra-thin, while the male beauty ideal is related with a muscular body. Attempting and failing to approximate this unattainable beauty ideal for both men and women may be related with the apparition of disordered eating, as shows the fact that drive for thinness and the pursuit of muscularity are related to eating disorders (Rodgers, Ganchou, Franko, & Chabrol, 2012).

While anorexia nervosa, bulimia nervosa and eating disorder not otherwise specified are the most frequent disorders in women (Hudson, Hiripi, Pope, & Kessler, 2007), muscle dysmorphia or bigorexia is generally found in men (Pope, Gruber, Choi, Olivardia, & Phillips, 1997). It is important to remark that although muscle dysmorphia is not currently a diagnosis listed in the Diagnostic and Statistical Manual of Mental Disorders, fifth Edition (DSM-V, American Psychiatric Association, 2013), as other eating disorders, experts agree that the disorder exists (Grieve, 2007). The main characteristics are a strong desire to increase musculature (Robert, Munroe-Chandler, & Gammage, 2009) and the addition of dietary supplements and drugs such as anabolic steroids to increase lean muscle mass (Olivardia, 2001). Some authors argue that the pursuit of muscularity component in muscle dysmorphia is parallel to drive for thinness in anorexia because of the similarities of the symptoms and the high attention to diet, as well as the compensatory behavior of excessive exercise (Murray, Rieger, Touyz, & De la Garza, 2010).

According to experts, disordered eating in Western societies is one of the major public health concerns (Suelves, 2006). As a matter of fact, in the last few years eating disorders are increasing (Mitchison, Hay, Slewa-Younan, & Mond, 2012), and some authors suggest it may be related to gender issues (McCabe & Ricardelli, 2004), but the reasons underlying the observed gender differences

are poorly understood. Specifically, gender ideology is known to play an important role in relation to disordered eating (De Young, Lavender, & Anderson, 2010) but further research is needed to a better understanding of disordered eating in males and females.

Gender role norms are socially constructed expectations about behavior and traits considered appropriate for men and women in a specific culture (Pleck, Sonenstein, & Ku, 1993) and gender ideology is the individual internalization of these gender role norms (Pleck et al., 1993). The internalization of this set of social and behavioral norms that are generally considered appropriate for men and women also refers to the way that men and women should look (thin in the case of women and muscular in the case of men, as it has been pointed out before). These roles differentially shape women and men's attitudes, preferences, emotional and physiological reactions, and behaviors (Moore & Stuart, 2004). For example, a meta-analysis has showed that gender ideologies are related with disordered eating in both women and men (Murnen & Smolak, 1997). For this reason, in this research it is studied if gender ideologies may be related with the differences that exist in disordered eating in men and women (Morgan, 2012).

Drive for thinness

Thinness is highly valued in Western culture in the case of women and is considered a key attribute of female beauty, and being thin is perhaps one of the most desirable conditions in society (Levitt, 2004). According to experts, dieting and drive for thinness are more typical of female concerns than male concerns (Grogan & Richards, 2002). In addition, although more men than women are overweight, more women than men reported weight dissatisfaction (Forrester-Knauss & Zemp, 2012). In general, it can be concluded, that women report more drive for thinness than men (Striegel-Moore et al., 2009).

Previous studies have showed that gender ideology, that may be defined as the individual internalization of societal and cultural beliefs about gender roles and appearance (Levant, 1996), may

be related with disordered eating. Williams and Ricciardelli (2001) reported that female college students who displayed symptoms of disordered eating showed more feminine traits. In the same line, a significant correlation between gender ideologies with scores on symptoms of disordered eating has been found (Bekker & Boselie, 2002). In addition, Pritchard (2008) has found that feminine women are more vulnerable to disordered eating behaviors than masculine and androgynous women and adds that gender ideologies are related with disordered eating in both men and women. For this reason, it is expected that participants high in a traditional gender ideology scale will report more drive for thinness than those with lower scores.

Pursuit of muscularity

Females report greater concerns about their weight, but males inform of a greater pursuit of muscularity (Grossbard, Lee, Neighbors, & Larimer, 2009). According to the research conducted so far, men score significantly higher on drive for muscularity -a perception of having an underdeveloped musculature combined with a desire to increase muscle mass- than do women (Bratland & Sundgot, 2012). These findings have led to the suggestion that drive for muscularity plays a central role to understanding men's body dissatisfaction (Smolak & Stein, 2006).

It is important to remark that it has been observed that men with an elevated drive for muscularity are more likely to identify with traditional male-stereotyped roles (McCreary, Saucier, & Courtenay, 2005). In addition, it has been found that men who have a high score in a masculinity scale reported higher drive for muscularity and less eating concerns than individuals with lower scores (Magallares, 2013). This last result suggests that a strong male ideology may be related with the apparition of muscle dysmorphia. But what happens with women who endorse a non-traditional female ideology? Although there are not many studies about the relationship between pursuit of muscularity and women, it has been found that female student-athletes, who are less feminine than "normal" girls, report significantly higher pursuit of muscularity

scores than female students (Steinfeldt, Carter, Benton, & M. Steinfeldt, 2011). For this reason, it is expected that women with low scores in a gender ideology scale should report more drive for muscularity than those who score high in the same scale.

To the date, there are not studies measuring at the same time drive for thinness and pursuit of muscularity in a sample of women. For this reason, it is conducted a study with a sample of young women, in order to analyze if there is a connection between gender ideology, drive for thinness and pursuit of muscularity. According to the reviewed literature the following hypothesis are expected: 1. Female individuals high in a traditional gender role scale will score more in a drive for thinness scale than those who score low (Bekker & Boselie, 2002). 2. Female individuals high in a traditional gender role scale will score, less in a drive muscularity scale than those who score low in female gender ideology scale (Steinfeldt et al., 2011).

Method

Sample

Participants were 615 Spanish female students of the UNED (Spanish Open University) from 18 to 30 years (age: $M = 25.56$, $SD = 4.29$) who were enrolled in a psychology course and who received extra credit for their participation. All participants were normal weight (Body Mass Index or BMI between 18 and 30; $Mean = 22.17$, $SD = 3.31$). Participants who had a BMI lower than 18 (underweight) or higher to 30 (obesity) were excluded from the final analysis in order to make the sample the most homogenous possible.

Procedure

To recruit participants, students of all the Spanish territory were contacted through the webpage of the university. Students were informed on the general purposes of the research and those who voluntarily wanted to participate filled out a booklet with the different questionnaires that was available for a short period of time in the webpage to be down-

loaded. After completing all the scales, participants deliver their answers by post to the main researcher.

Instruments

To measure drive for thinness it was used the Spanish version of The Eating Disorder Inventory 2 (EDI-2) (English version: Garner, Olmsted, & Polivy, 1983; Garner, 1991; Spanish version: Corral, Gonzáles, Pereña, & Seisdedos, 2006). The EDI-2 is a self-report questionnaire widely used both in research and in clinical settings to assess the symptoms and psychological features of eating disorders. The original version of the EDI was developed in 1983 by Garner and has been used worldwide to screen for eating disorders in the general population, to measure treatment effect and outcome, as well as in routine clinical evaluations. The EDI-2 (Garner, 2004) consists of 91 items scored on a 5-point Likert scale ranging from “never” (1) to “always” (5). For the purpose of the investigation the sub-scale of Drive for Thinness was used (8 items). This subscale measures if participants have an excessive concern with dieting, preoccupation with weight, and fear of weight gain ($\alpha = 0.97$). A score was computed by averaging the 8 items of the subscale. Higher scores on the Drive for Thinness subscale of the EDI-2 reflect greater drive for thinness.

To measure female gender ideology it was used the Gender Ideology Scale (GIS) (Spanish version: Moya, Navas, & Gómez, 1991; Moya, Expósito, & Padilla, 2006). The GIS evaluates if women endorse or not a traditional gender ideology. Traditional gender ideology includes a preference for the conventional division of labor between male providers and female homemakers and for the associated patriarchal system that cedes more power and status to the male provider (Glick & Fiske, 2001). The GIS ($\alpha = 0.87$) consists of 12 items scored on a 5-point Likert scale ranging from “strongly disagree” (1) to “strongly agree” (5). A score was computed by averaging the 12 items of the scale. Higher scores on the GIS reflect greater endorsement of the traditional female ideology.

To measure pursuit of muscularity, the Spanish version of The Muscle Appearance Satisfaction

Scale (MASS) (English version: Mayville, Williamson, White, Netemeyer, & Drab, 2002; Spanish version: González-Martí, Fernández-Bustos, Contreras-Jordan, & Mayville, 2012) was used. The MASS is a scale that assesses characteristics of muscle dysmorphia. This 19-item self-report measure was developed based on the criteria for bigorexia. All ratings are on a 5-point Likert scale, with 1 being “definitely disagree” and 5 being “definitely agree”. A score was computed by averaging the 19 items of the MASS scale ($\alpha = 0.88$). Higher scores on the MASS reflect greater pursuit of muscularity.

BMI was calculated as the relationship between weight (kg) and height squared (m). Weight and height were provided by the participants of the study.

Results

The gender ideology variable was dichotomized. The groups of participants (low scores and high scores on GIS) were formed by categorizing those individuals with the higher and lower scores on the gender ideology scale (50% upper and 50% below). This procedure is a common approach (see for example, Turner, Dobson, & Pocock, 2010). These groups were correctly formed, given that the mean scores on classification variables (GIS) were significantly different between groups [low score on GIS = 1.17, $SD = 0.17$ vs high score on GIS = 2.27, $SD = 0.73$ $F_{1,613} = 750.12$, $p < 0.01$].

Cohen's d s (Cohen, 1988) were also calculated as indices of effect size. Cohen (1988) defined d as the difference between means divided by standard deviation of either group (d s ≥ 0.2 are considered medium effect sizes and d s ≥ 0.8 large effect sizes). Participants with medium scores were not selected for the final sample and were excluded of the analysis.

A one-way Analysis of Variance (ANOVA) was conducted (see Table 1) with gender ideology (GIS) as the Independent Variable (IV) and drive for thinness (EDI-2) and pursuit of muscularity (MASS) as Dependents Variables (DV). As it can be seen in Table 1, female participants with high scores on GIS reported more drive for thinness and

TABLE 1

Mean and Standard Deviations of the DVs of the study by GIS of the participants

	GIS	M	SD	F	Sig.	η_p^2	N	d
EDI-2	Low	2.40	0.86	31.41	<0.01	0.05	358	0.45
	High	2.82	0.99					
MASS	Low	1.95	0.69	14.90	<0.01	0.09	358	-0.31
	High	1.76	0.49					

Note. EDI-2 = Eating Disorder Inventory 2 (drive for thinness) (scale from 1 to 5); MASS: Muscle Appearance Satisfaction Scale (pursuit of muscularity) (scale from 1 to 5); GIS: Gender Ideology

Source: own work

less pursuit of muscularity than women with low scores on the gender ideology scale. These differences are significant according to the *F*s found. In addition, it can be said and the effect sizes found are medium.

Discussion

It has been found that female individuals high in a traditional gender role scale score more in a drive for thinness scale (Bekker & Boselie, 2002) and less in a pursuit of muscularity scale (Steinfeldt et al., 2011) than those participants who score low in a female ideology scale. This result shows that women who endorse a traditional gender ideology are more worried about their thinness but not to develop a muscular body (which is more consistent with the traditional male ideology). These results suggest that the endorsement of a traditional gender of ideology for women may be related with disordered eating. Taken together, it can be said that results give support to the hypotheses of the study.

In general, it can be said that the results suggest that the associations between gender ideology and disordered eating behavior (drive for thinness) should be considered in the development of effective prevention programs against disordered eating in women. Given the different pattern of prevalence and predictors of weight dissatisfaction and disordered eating behaviors in women compared to men, a better understanding of these related factors is important for the development of gender-appropriate prevention or intervention programs to reduce disordered eating.

Finally, in this paper it is suggested that the differences in the endorsement of the traditional gender ideology, the internalization of a common set of standards and expectations associated with the traditional masculine role (Levant & Richmond, 2007), may have a very important role in the explanation of the differences between men and women in disordered eating.

The current study is subject to some limitations that deserve mention. First of all, it should be noted that the sample consisted of psychology students and that it would be necessary to reply these findings with clinical samples in order to improve the quality of the study. Second, in the research self-reports has been used. It would be necessary, for future investigations, to conduct studies with the same goals, using not only self-reports, but also more objective criteria, evaluating the same constructs with alternative measures. Finally, it is a cross-sectional study. However, only longitudinal research could help clarify the role of the studied variables in the development of disordered eating. Despite these limitations, the study provides new data with potential applications.

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