

Disordered eating attitudes and behaviors in college women: association with physical activity, internalization of appearance ideals, and self-objectification

Actitudes y comportamientos alimentarios desordenados en mujeres universitarias: asociación con la actividad física, internalización de ideales de apariencia y autoobjetivación

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Abstract. This study aimed to examine associations of disordered eating attitudes and behaviors with moderate to vigorous physical activity, internalization of appearance ideals, and self-objectification in college women. Participants were 472 Brazilian college women, aged 18 to 30 years (mean 21.85 years; SD = 4.46). Disordered eating attitudes and behaviors were assessed using the Eating Attitudes Test. Physical activity levels were assessed using the International Physical Activity Questionnaire (long version). Internalization of appearance ideals was assessed using the Sociocultural Attitudes Towards Appearance Questionnaire-4-Revised-Female. Self-objectification was assessed using the Self-Objectification Beliefs and Behaviors Scale. Spearman's correlation coefficients and multiple linear regression were conducted to examine the associations between the variables under investigation. Disordered eating attitudes and behaviors showed significant ($p < 0.01$) and positive correlations with all independent variables. In the multiple linear regression analysis, only the internalization of the muscular ideal was not associated with the outcome. The final model explained 41.3% of the variation of the dependent variable scores. College women may be susceptible to disordered eating attitudes and behaviors, according to their levels of physical activity, internalization of the thin/low body fat ideal, internalization of the general attractiveness ideal, and self-objectification.

Keywords: Physical Appearance. Exercise. Eating Behavior. Body Image. Women.

Resumen. Este estudio verificó las asociaciones de actitudes y comportamientos alimentarios desordenados con la actividad física moderada y vigorosa, la internalización de los ideales de apariencia y la autoobjetivación en mujeres universitarias. Participaron 472 estudiantes brasileñas de 18 a 30 años (media 21.85 años; DE = 4.46). Las actitudes y comportamientos alimentarios se evaluaron mediante el Eating Attitudes Test. Los niveles de actividad física se evaluaron mediante el International Physical Activity Questionnaire (versión larga). La internalización de los ideales de apariencia se evaluó mediante el Sociocultural Attitudes Towards Appearance Questionnaire-4-Revised-Female. La autoobjetivación se evaluó mediante la Self-Objectification Beliefs and Behaviors Scale. Se realizaron los coeficientes de correlación de Spearman y la regresión lineal múltiple con el método paso a paso para examinar las relaciones entre las variables. Las actitudes y comportamientos alimentarios desordenados mostraron correlaciones significativas ($p < 0.01$) y positivas con todas las variables. En el análisis de regresión lineal múltiple, solo la internalización del ideal muscular no se asoció con el resultado. El modelo final explicó el 41,3% de la variación de las puntuaciones de la variable dependiente. Las mujeres universitarias pueden ser susceptibles a actitudes y comportamientos alimentarios desordenados, de acuerdo con el nivel de actividad física, internalización del ideal de delgadez/baja grasa corporal y de atractivo general, y autoobjetivación.

Palabras clave: Apariencia Física. Actividad Física; Conducta Alimentaria; Imagen Corporal. Mujeres.

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Introduction

Feeding includes food intake and the nutrients contained in it, the ways of combining and preparing food, the characteristics of the way of eating, and the cultural and social dimensions involved in the food's practices (Ministério da Saúde, 2014). Nutrient intake is essential for good health. However, a healthy diet adoption depends on several factors of a physical, economic, political, cultural, or social nature, which can positively or negatively influence a subject's eating pattern (Ministério da Saúde, 2014).

Thus, these influences can result in disordered eating attitudes and behaviors. Eating attitudes refer to an individual's relationship with food and diet, including beliefs, thoughts, feelings, behaviors, and are influenced by environmental factors, such as culture, family, religion, society, among others (Alvarenga & Koritar, 2015). Eating behaviors refer to all types of constructs in the context of feeding, which determine elements of the pre-swallowing moment, such as what to eat, how to eat, when to eat, and

where eat, and also refers to the act of eating itself (Alvarenga & Koritar, 2015).

Among the different factors that can influence women's eating attitudes and behaviors, is the practice of physical activity. Regular physical activity combined with healthy eating ensures normal metabolic activity, and is, therefore, essential for health and body weight maintenance (Witt & Schneider, 2011). Although that, there may be a trend among women practicing physical activity to adopt disordered eating attitudes and behaviors (Varga et al., 2014). On the other hand, the trend towards excessive physical exercise among women with eating disorders is also possible (Mathisen, et al., 2018), since one of the reasons why women exercise is because appearance and to maintain their silhouette (Román et al., 2018; Rico-Díaz et al., 2019).

Another factor that can influence women's eating attitudes and behaviors is the internalization of appearance ideals. According to Witt and Schneider (2011), the beginning of this century was marked by the establishment of a new order: women must present a strong, toned, thin and perfect body, and the current consumer society disregards the

countless inequalities and diversity of biotypes and disregards aspects related to health.

Currently, being thin is perceived by most women as one of the main attractiveness criteria (Hosseini, et al., 2016). Thus, women seem to be easily influenced to achieve a slim body and, for fear of not being considered attractive, engage in unhealthy behaviors to lose weight (Hosseini, et al., 2016). Despite these data, for sociocultural pressures towards appearance to have a detrimental effect on the subject, they must be internalized (Izydorczyk & Sitnik-Warchulska, 2018). The internalization of appearance ideals can lead to body dissatisfaction, restrictive diet (Vartanian & Hopkinson, 2010), and eating disorder symptoms (Dakanalis, et al., 2017).

Self-objectification is also a factor to be considered as influencing women's eating attitudes and behaviors. Self-objectification is a multidimensional construct related to women's experiences of being viewed and valued primarily for their physical appearance by other people, which can influence them to internalize an observer's perspective on themselves (Fredrickson & Roberts, 1997). Studies showed that self-objectification experiences are related to eating disorders (Dakanalis, et al., 2017), greater body dissatisfaction (Dakanalis, et al., 2016), decreased awareness of internal bodily states, depression, and sexual dysfunction (Fredrickson & Roberts, 1997).

Disordered eating attitudes and behaviors can lead to eating disorders such as anorexia nervosa, bulimia nervosa and binge eating, which are caused by body image disturbance (Delinsky & Saint Germain, 2012; Crowther & Ridolfi, 2012). Body image disturbance is characterized by dysfunctions in the subjective experience of one's own body, like body image distortion, body size overestimation, body dissatisfaction, body checking or body avoidance, and overvaluation of weight and shape (Delinsky & Saint Germain, 2012; Crowther & Ridolfi, 2012).

Considering the possible damage to eating attitudes and behaviors related to the practice of physical activity in excess, the internalization of appearance ideals and self-objectification; and also considering that women up to 30 years of age are the most affected by these factors (the age that usually coincides with the period when most people are enrolled in higher education); it is important and necessary to investigate the influence of these sociocultural aspects on the eating attitudes and behaviors of this population. Therefore, the present study aimed to examine possible associations of disordered eating attitudes and behaviors with moderate to vigorous physical activity, the internalization of appearance ideals, and self-objectification in college women.

Methods

This cross-sectional study is part of a larger project entitled "Transcultural Adaptation to Brazilian Portuguese of Three Cognitive Measures of Body Image". The research followed the ethical guidelines outlined in the Declaration of

Helsinki and was approved by the Research Ethics Committee of the State University of Santa Catarina (Protocol nº 3.012.574/2018).

Participants

Participants were college women regularly enrolled in nine undergraduate courses at a public university in Florianópolis, Santa Catarina, Brazil. Students were included in the study if they were 18 years old or older. Pregnant students and those who did not answer all the questions corresponding to the variables of interest in the present study were excluded.

Procedures

Initially, permission to collect data was granted by the principals and department heads of the university. Then, teachers who taught subjects in the selected courses were contacted by email to request permission to conduct data collection in the schedule of their classes. In scheduled days and times, data collection was conducted in the classroom, from September to November 2018, with the presence of a researcher.

All women present in the classroom were invited to participate in the study and were informed about the aim and the importance of this research, about voluntary participation, without receiving any kind of reward, on the anonymity and confidentiality of the data provided, on the possibility of withdrawing at any time and not be obliged to answer all items of the questionnaire. Students who agreed to participate signed the Informed Consent Form and answered a self-administered questionnaire containing demographic questions (age and course) and questions about disordered eating attitudes and behaviors, physical activity, internalization of appearance ideals, and self-objectification.

Dependent variable

Disordered eating attitudes and behaviors

Disordered eating attitudes and behaviors were assessed using the Brazilian Portuguese version of the Eating Attitudes Test (EAT-26; Bighetti, et al., 2004). This questionnaire consists of 26 items rated on a six-point scale, ranging from "never" to "always". Items were summed to achieve a total score, which could vary from zero to 78 points. The questionnaire showed good internal consistency (Cronbach's alpha = 0.82) in the study Bighetti et al. (2004). Cronbach's alpha for this questionnaire was 0.84, in the sample investigated in the present study.

Independent variables

Physical activity

Leisure-time physical activity was assessed using the Brazilian version of the International Physical Activity Questionnaire (IPAQ, long version; Matsudo, et al., 2001), considering the activities of moderate to vigorous intensity. The total physical activity was obtained by adding the amount of total moderate physical activity with the amount of total vigorous physical activity.

Internalization of appearance ideals

The internalization of appearance ideals was assessed using the Brazilian Portuguese version of the Sociocultural Attitudes Towards Appearance Questionnaire-4-Revised-Female (SATAQ-4R-Female; Claumann, 2019). The 15 items from the internalization subscales (thin/low body fat, muscular, and general attractiveness) were used. Items are rated on a five-point scale, ranging from “definitely disagree” to “definitely agree”. A mean score was obtained for each subscale. Higher scores indicate greater internalization of appearance ideals. The internalization subscales showed good internal consistency (Cronbach's alpha values of 0.84 or greater) in the study of Claumann (2019). Cronbach's alpha for internalization subscales was 0.83 or greater, in the sample investigated in the present study.

Self-objectification

Self-objectification was assessed using the Brazilian Portuguese version of the Self-Objectification Beliefs and Behaviors Scale (SOBBS; Claumann, 2019). This scale comprises 14 items rated on a five-point scale, ranging from “strongly disagree” to “strongly agree”. A mean score of all items was obtained. Higher scores indicate greater self-objectification. The scale showed adequate internal consistency (Cronbach's alpha = 0.91) in the study of Claumann (2019). Cronbach's alpha for this scale was 0.88, in the sample investigated in the present study.

Statistical analysis

Descriptive analyses of mean and standard deviation were conducted. Data normality was examined using Kolmogorov-Smirnov test. Spearman's correlation coefficient was used to examine the relationship between disordered eating attitudes and behaviors and the independent variables. The association of disordered eating attitudes and behaviors with the independent variables was tested using multiple linear regression, using the stepwise method. All analysis were performed using the IBM SPSS Statistics 20, and the significance level was set at 5%.

Table 1. Participant characteristics, according to the variables investigated in the study.

Variables	Mean (SD)
Age (years)	21.85 (4.46)
Eating attitudes and behaviors (score)	17.26 (10.67)
Moderate to vigorous physical activity (min/week)	171.91 (211.83)
Internalization: thin/low body fat (score)	3.18 (1.13)
Internalization: muscular (score)	2.22 (1.06)
Internalization: general attractiveness (score)	4.12 (0.73)
Self-objectification (score)	2.36 (0.61)

SD: standard deviation

Results

A total of 647 college women participated, of which 175 were excluded from the analyses of this study for presenting missing data in the investigated variables. Thus, the final sample consisted of 472 college women aged 18 to 30 years (mean of 21.85 years; SD = 4.46). In general, the participants showed low eating disorder symptoms, moderate lev-

els of internalization of the ideals of thin/low body fat, muscular and general attractiveness, and moderate levels of self-objectification. Participant characteristics are presented in Table 1.

Disordered eating attitudes and behaviors showed significant ($p < 0.01$) and positive correlations with all independent variables (physical activity, $r = 0.193$; thin/low body fat ideal internalization, $r = 0.604$; muscular ideal internalization, $r = 0.125$; general attractiveness ideal internalization, $r = 0.511$; self-objectification, $r = 0.440$), according to the results presented in Table 2.

Table 2. Correlations of eating attitudes and behaviors (dependent variable) with the independent variables investigated in the study.

Variables	1	2	3	4	5
1 Eating attitudes and behaviors					
2 Moderate to vigorous physical activity	0.193*				
3 Internalization: thin/low body fat	0.604*	0.091**			
4 Internalization: muscular	0.125*	0.330*	0.146*		
5 Internalization: general attractiveness	0.511*	0.061	0.557*	0.192*	
6 Self-objectification	0.440*	0.007	0.507*	0.206*	0.594*

* $p < 0.01$; ** $p < 0.05$.

Table 3. Association of eating attitudes and behaviors with independent variables through multiple linear regression.

	B	SE	β
Model 1			
Constant	-0.561	1.19	
Internalization: thin/low body fat	5.601	0.353	0.590*
Model 2			
Constant	-6.207	1.594	
Internalization: thin/low body fat	4.551	0.399	0.480*
Self-objectification	3.807	0.737	0.217*
Model 3			
Constant	-7.311	1.593	
Internalization: thin/low body fat	4.410	0.395	0.465*
Self-objectification	3.962	0.728	0.226*
Moderate to vigorous physical activity	0.007	0.002	0.137*
Model 4			
Constant	-11.858	2.188	
Internalization: thin/low body fat	3.960	0.420	0.418*
Self-objectification	2.843	0.811	0.162*
Moderate to vigorous physical activity	0.007	0.002	0.131*
Internalization: general attractiveness	2.102	0.697	0.145*

$R^2 = 0.349$ to the model 1; $\Delta R^2 = 0.035$ to the model 2; $\Delta R^2 = 0.019$ to the model 3; $\Delta R^2 = 0.011$ to the model 4. * $p < 0.01$.

In the multiple linear regression analysis, only the muscular ideal internalization was not associated with the outcome. The other independent variables were positively associated with the outcome. That is, the greater the levels of physical activity, thin/low body fat and general attractiveness internalization, and self-objectification, the more disordered the women's eating attitudes and behaviors are. The final model explained 41.4% of the variation in the scores of the dependent variable. The variable with the greatest power to predict disordered eating attitudes and behaviors was thin/low body fat ideal internalization ($R^2 = 0.349$, $F = 251.546$, $p < 0.001$), followed by self-objectification ($\Delta R^2 = 0.035$; $F = 26.673$, $p < 0.001$), moderate to vigorous physical activity ($\Delta R^2 = 0.019$, $F = 14.600$, $p < 0.001$), and general attractiveness ideal internalization ($\Delta R^2 = 0.011$, $F = 9.085$, $p = 0.003$) (Table 3).

Discussion

In general, the participants of the present study showed low and medium scores on disordered eating attitudes and

behaviors, internalization of appearance ideals, and self-objectification. Eating attitudes and behaviors were significantly and positively correlated with all the independent variables investigated. Therefore, the greater the moderate to vigorous physical activity and the higher the levels of internalization of the ideals of thin/low body fat, muscular, and general attractiveness, as well as self-objectification, the more disordered the eating attitudes and behaviors of college women are. Also, except for the muscular ideal internalization, the other independent variables were positively associated with the outcome.

The mean score of women participating in this study in the Eating Attitudes Test was similar to the scores found in studies conducted with college women in Kuwait (Alkazemi, et al., 2018) and with young adult women in the United Emirates (Thomas, et al., 2018), which used the same measure. Regarding the subscales of thin/low body fat ideal internalization, muscular ideal internalization, and general attractiveness ideal internalization, the mean scores found in the present study were very close to those verified in college women from the United States and Turkey, in studies using the same measure (Cihan, et al., 2016; Schaefer, et al., 2017). Moreover, the mean score on the self-objectification scale was quite similar to the score found in college women from the United States (Lindner & Tantleff-Dunn, 2017). Thus, the scores of the participants of the present study in the different variables investigated suggest similar behaviors to those of college women from other cultures and countries.

Regarding the association analysis, the thin/low body fat ideal internalization showed the greatest power to predict disordered eating attitudes and behaviors. The relationship between these variables has been demonstrated in previous studies with similar results (Argyrides, 2013; Homan, 2010; Schaefer, Burke, & Thompson, 2018; Schaefer, et al., 2017; Dakanalis, et al., 2016). Homan (2010) pointed out that the thin/low body fat ideal internalization promotes body dissatisfaction (since this ideal is unattainable for most women), and dietary behaviors (to get a slim body). The author also stressed that both situations are risk factors for eating disorders. Furthermore, there is evidence that healthy college students (without eating disorders) had significantly lower levels of thin/low body fat ideal internalization when compared to college students with eating disorders (Schaefer, Burke, & Thompson, 2018).

The thin/low body fat ideal is suggested to be the most internalized appearance ideal by women, in several countries, such as United States, Italy, England and Australia (Schaefer, et al., 2019), Turkey (Cihan, et al., 2016), France (Rodgers, et al., 2016), China and Croatia (Stojcic, et al., 2020), when compared to the muscular ideal. It seems, therefore, that thin/low body fat ideal internalization is recurrent in women, due to the current standards of beauty imposed by different socio-cultural agents. This is worrying since internalization can cause harmful consequences to physical and mental health, such as disordered eating attitudes and behaviors, which, in turn, can trigger

eating disorders (Dakanalis, et al., 2016). Thus, efforts are needed to raise the awareness of the participants in the present study, as well as the university population and young adult women, in general, that healthy eating is not necessarily restrictive, and there is an infinity of biotypes, being, therefore, for most women, very difficult to achieve and maintain the ideal standards of thin/low body fat in a healthy and not harmful way.

Self-objectification was the second variable included in the model, as a predictor of disordered eating attitudes and behaviors. This result corroborates findings from previous studies (Schaefer, et al., 2018; Fitzsimmons-Craft, et al., 2011, Dakanalis, et al., 2016; Dakanalis, et al., 2017; Alleva, et al., 2015). Self-surveillance and body shame, aspects included in the self-objectification construct, were moderately and strongly correlated with eating disorder symptoms, respectively, in American women of different ethnicities (Schaefer, et al., 2018). On the other hand, in the study by Fitzsimmons-Craft et al., (2011), women who completely recovered from eating disorders, or who did not demonstrate any type of eating disorder, had significantly lower levels of body surveillance and body shame, compared to partially recovered women and those with an active eating disorder.

The relationship between self-objectification and disordered eating attitudes and behaviors may be explained by the fact that habitual monitoring and body concerns can lead to higher body dissatisfaction, which increases eating disorder symptoms (Dakanalis, et al., 2016). Since women often experience or witness situations of sexual objectification in their daily lives, the impact of these experiences on women's eating attitudes and behaviors must be discussed in the university environment because self-objectification plays a significant role in the onset and cessation of eating disorders (Dakanalis, et al., 2016), as well as in their risk and maintenance (Dakanalis, et al., 2017).

In an attempt to reduce self-objectification and improve body image, Alleva et al. (2015) tested the Expand Your Horizon, a training program composed of three structured writing tasks, for women to focus on body functionality. The study took place in the Netherlands with women aged 18 to 30 years old, mostly college students. After the intervention, body satisfaction and body appreciation increased, while self-objectification decreased. The program, therefore, proved to be an alternative to try to minimize the negative effects caused by self-objectification. Thus, universities may plan and implement similar programs aimed at the well-being of their students, through extension projects composed by multidisciplinary teams, for example, with the support of psychologists, nutritionists, and physical education professionals.

Regarding the association of moderate to vigorous physical activity with disordered eating attitudes and behaviors, similar results were found in recent studies (DSM-5, 2013; Pettersen, et al., 2017, Mathisen, et al., 2018). The Diagnostic and Statistical Manual of Mental

Disorders-5 (DSM-5, 2013) highlights excessive or compulsive exercise as inappropriate and recurrent behavior in patients with eating disorders, who use it to prevent weight gain or compensate for some eating attitudes. Similarly, Varga et al. (2014) found that college students more engaged in sports have a greater trend to eating disorders when compared to college students who do not practice any sport (89.4% of the participants were women).

However, physical exercise, when practiced regularly and with due supervision, can bring women in eating disorders treatment a personal mastery experience with increased self-esteem for being able to master the training method or perform an activity that they thought they were unable to accomplish, changing their perspectives about the exercise (Pettersen, et al., 2017). Exercise can stop being just a way to achieve thinness and become a way to relax and maintain body functionality, with improvements in physical fitness in everyday situations, understanding of an adequate caloric intake, and improvement in the sense of listening to one's own body better, ceasing to be an important part of the disorder (Pettersen, et al., 2017).

In the same perspective, an experimental study conducted with Norwegian women (18 to 40 years of age) with eating disorders observed a reduction in the scores of a test to detect the practice of compulsive exercise (Mathisen, et al., 2018). During and after the intervention involving two different protocols, one combining physical exercise with diet and the other using cognitive-behavioral therapy directed to compulsive exercise, both had effects on the need to exercise for weight control purposes and comply with self-inflicted rules regarding exercise (Mathisen, et al., 2018). Thus, although exercise may be used excessively and compulsively by women with eating disorders, the practice with adequate supervision can improve aspects related to the disorder. Therefore, it is interesting that college students are guided on the importance of physical exercise, not only for the health benefits, like reducing the prevalence of overweight and obesity (Chávez Valenzuela et al., 2018), improvement of physical fitness (Bahamonde et al., 2019), improvement in levels of depression and subjective well-being (Guillen Pereira et al., 2018), improved self-esteem (García González & Froment, 2018), but also for the positive impact that it can bring on disordered eating attitudes and behaviors. The last variable included in the model, as a predictor of disordered eating attitudes and behaviors, was the general attractiveness ideal internalization, corroborating results of previous studies (Izydorczyk & Sitnik-Warchulska, 2018; Hosseini, et al., 2016; Vartanian & Hopkinson, 2010; Argyrides, 2013). According to Izydorczyk and Sitnik-Warchulska (2018), when internalized, the socio-cultural appearance ideals, especially those promoted by the mass media, are related to the occurrence of risk factors for eating disorders in women, in different age groups. Hosseini et al. (2016) point to a positive correlation between the intention to have weight and appearance considered ideal (important criteria in general attractiveness) and

disordered eating attitudes and behaviors and, for Vartanian and Hopkinson (2010), the internalization of social ideals of attractiveness is capable of predicting a restrictive diet.

Similarly, Argyrides (2013) states that feelings of attractiveness are negatively related to disordered eating attitudes and behaviors. Thus, the lower the level of attractiveness and satisfaction with appearance, the greater the incidence of disordered eating attitudes and behaviors (Argyrides, 2013). As previously mentioned, efforts are needed to make college students aware of the possible negative consequences of internalizing these appearance ideals, since they can be detrimental to eating attitudes and behaviors.

The muscular ideal internalization was the only variable not associated with disordered eating attitudes and behaviors. That may be related to the measures used to assess these variables in the present study since items of the EAT-26 are more related to the symptoms of anorexia nervosa (Garner, et al., 1982). Thus, the muscular ideal internalization may be more related to other eating disorders. Evidence suggests that the athletic ideal internalization, characterized by toned abdomen, firmer lower body, and muscular upper body, is associated with restrictive diet behaviors and symptoms of bulimia nervosa, in college women and women from the community (Bell, et al., 2015). Furthermore, in the study by Pritchard et al., (2011), in which different measures were used, it was found that food concern was the variable with the greatest power to predict drive for muscularity in college women.

Taken together, the results of the present study point to the need for greater attention to the college community in practice since it is vulnerable and exposed to factors that can trigger body dissatisfaction and, consequently, eating disorder symptoms. Interventions in the academic community are suggested to inform and raise awareness among students about adequate caloric intake, benefits and importance of supervised physical exercise, and negative consequences of internalizing thin/low body fat ideals, general attractiveness ideals, and self-objectification, to promote well-being with one's own body and acceptance of the diversity of existing biotypes.

Although the variables thin/low body fat ideal internalization, self-objectification, moderate to vigorous physical activity, and general attractiveness ideal internalization were positively associated with disordered eating attitudes and behaviors, it can be said that these variables also are related to and influence each other. Thus, everything seems to be closely linked to body dissatisfaction and, consequently, to the desire to achieve thin/low body fat standards.

Finally, it is necessary to consider that the use of a measure to assess disordered eating attitudes and behaviors more related to the symptoms of anorexia nervosa implies caution in the interpretation of the results, as other types of eating disorders may be present among the participants and can be related to the variables investigated in this study in different ways. On the other hand, the use of measures recently validated in national samples, which analyze the internalization

of appearance ideals and self-objectification are strengths of the study since both analyze issues related to cognitive and behavioral aspects of body image in a depth and befitting way with the current state of knowledge about these constructs.

Conclusion

Together with the results previously presented in the literature, the results of the present study demonstrated that college women may be susceptible to disordered eating attitudes and behaviors, according to physical activity levels, thin/low body fat ideal internalization, general attractiveness ideal internalization, and self-objectification. The greater these levels, the more disordered are eating attitudes and behaviors.

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