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Does Accessed Content Matter? Social Media and Body (Dis)satisfaction: A Moderation Analysis

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Abstract: The type of content accessed on social networks may negatively affect body image. The objective of the study is to identify in the relationship between the frequency of use of social networks (Freq. SM) and body (dis)satisfaction, the moderating role of following physical appearance focused pages (FON) and to identify differences in the levels of body (dis)satisfaction between those who follow or not these pages. 499 women (71.1%) and 203 men (28.9%) adults participated. All answered a sociodemographic questionnaire and the Situational Body Satisfaction Scale. Moderation analyses were performed. Significant differences were identified in body (dis)satisfaction between women who follow pages focused on physical appearance and those who do not. For women, "FON" is a significant moderator. For men, no results were significant. The findings contribute to reflections on the female body ideal the research method applied to social networks.

Keywords: body image, body dissatisfaction, social networks

O Conteúdo Acessado Importa? Redes Sociais e (In)satisfação Corporal: Análise de Moderação

Resumo: O tipo de conteúdo acessado nas redes sociais pode afetar negativamente a imagem corporal. O objetivo do estudo foi identificar na relação entre a frequência do uso de redes sociais (Freq. SM) e (in)satisfação corporal, o papel moderador de seguir páginas focadas em aparência física (FON) e identificar diferenças nos níveis de (in)satisfação corporal entre quem segue ou não essas páginas. Participaram 499 mulheres (71.1%) e 203 homens (28.9%) adultos. Todos responderam um questionário sociodemográfico e a Escala Situacional de Satisfação Corporal. Foram realizadas análises de moderação. Identificaram-se diferenças significativas na (in)satisfação corporal entre mulheres que seguem páginas focadas em aparência física e que não seguem. Para as mulheres, "FON" é um moderador significativo. Para os homens, nenhum resultado foi significativo. Os achados contribuem para reflexões sobre o ideal corporal feminino e o método de pesquisa aplicado ao campo das redes sociais.

Palavras-chave: imagem corporal, insatisfação corporal, redes sociais

El Contenido Accesado Importa? Redes Sociales e (In)Satisfacción Corporal: Análisis de Moderación

Resumen: El contenido accedido en las redes sociales puede afectar negativamente la imagen corporal. El objetivo del estudio es identificar en la relación entre la frecuencia de uso de las redes sociales (Freq. SM) y (in)satisfacción corporal, el papel moderador del seguimiento de las páginas enfocadas en la apariencia física (FON) y identificar diferencias en los niveles de (in)satisfacción corporal entre los que siguen o no estas páginas. Participaron 499 mujeres (71,1%) y 203 hombres (28,9%) adultos, quienes respondieron un Cuestionario Sociodemográfico y la Escala Situacional de Satisfacción Corporal. Se realizó una análise de moderación, identificándose diferencias entre las mujeres que siguen páginas enfocadas en la apariencia física y mujeres que no. Para ellas, "FON" es un moderador significativo. Para los hombres, ningún resultado fue significativo. Los resultados contribuyen a reflexiones sobre el cuerpo femenino ideal y el método de investigación aplicado a las redes sociales.

Palabras clave: imagen corporal, insatisfacción corporal, redes sociales

Body image is a construct formed by perceptual and attitudinal components (Cash, 2011). Among the attitudinal components is body satisfaction. This is the degree of appreciation for one's own appearance, especially for weight, body shape, and specific body parts. Body dissatisfaction, on the other hand, is about unfavorable evaluations and dissatisfaction in relation to one's own body (Cash, 2011; Menzel, Krawczyk, & Thompson, 2011).

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Among the main factors that contribute to body (dis)satisfaction are the processes of socialization about the meaning of physical appearance and internalization of cultural standards associated with the body (Hirata, Pérez-Nebra, & Pilati, 2012; Swami, 2015). These social constructions are guided by the valuation or devaluation of attributes and produce ideals of beauty within a culture (Benevides & Rodrigues, 2017). Among the agents that transmit these ideals and body norms is the media. This is considered one of the pillars of the sociocultural model called "tripartite", along with peers and parental influences (Tiggemann, 2011).

Before the internet, traditional media, i.e. magazines, television, and movies, was the focus of different studies with men and women (Grabe, Ward, & Hyde, 2008; Ricciardelli, Clow, & White, 2010; Tiggemann, 2014). Historically, women exposed in the media are thinner than the average population (Grabe et al., 2008). Regarding the male body, the media usually portrays a mesomorphic, muscular body with defined shoulders and abdomen (Ricciardelli et al., 2010; Tiggemann, 2011). Correlational and experimental studies point to an association between exposures to body ideals represented in the media and body dissatisfaction in men and women (Grabe et al., 2008; Tiggemann, 2014). This association is related to the internalization of these beauty standards as faithful representations of reality (Hirata et al., 2012) and to social/body comparisons focused on physical appearance, leading to constant comparisons with unrealistic models and greater body dissatisfaction (Carvalho, Gomes, & Ferreira, 2016).

With the internet, a new logic of social interaction is configured, essentially centered on the image (Fardouly & Vartanian, 2016). Social media refer to online platforms, such as Facebook and Instagram and Twitter, where users can create and share visual and textual content (Kaplan & Haenlein, 2010). As of April 2022, 4.65 billion social media users were reported around the world, and that number continues to grow. Surfing social media is an everyday activity for many users. It is estimated, for example, that the average time spent on social networks in 2022 is 147 minutes (Dixon, 2022).

Social media widely disseminates content focused on physical appearance (Fardouly & Vartanian, 2016; Saiphoo & Vahedi, 2019) and the user commonly presents an idealized version of themselves, posting photos that are often edited or assembled to achieve the desired effect. Thus, the images portrayed on social media are also unrealistic, such as the models often portrayed by traditional media (Cohen, Newton-John, & Slater, 2018; Fardouly & Vartanian, 2016).

Unlike traditional media that usually portrays celebrities, on social media users post photos of themselves and interact socially (Fardouly & Vartanian, 2016). Research suggests that social comparisons with peers are the most influential type of social comparison (Heinberg & Thompson, 1992; Schutz, Paxton, & Wertheim, 2002). These findings are anchored in the social comparison theory proposed by Festinger (1954), which posits that people tend to compare themselves to similar role models, as these comparisons offer more efficient evaluative information. Furthermore, social networks offer the possibility of posting content and photos in real time (Kane, Alavi, Labianca, & Borgatti, 2014).

Saiphoo and Vahedi's (2019) meta-analysis analyzed 63 publications and included a sample of 36552 participants. The authors further measured the magnitude of the relationship between social media use and body image disturbances (e.g., body dissatisfaction; internalizing body standards). The moderating role of the type of social network use was tested. This variable was grouped into two categories: studies that operationalized social media use from time of use and studies that examined social media use specifically focused on physical appearance (e.g., measuring the frequency of social comparisons focused on physical appearance). Type of social network use was a significant moderating variable ($Q = 15.89$; $p < .001$). It was also identified that generic social media use ($k = 44$; $r = 0.114$) would be less associated with body image disruption than social media use related to physical appearance ($k = 16$; $r = 0.305$), such as viewing photos of relevant targets of social comparisons focused on body image. Thus, the authors recommend that future studies take into consideration the type of content with which the user interacts on social networks.

Body (dis)satisfaction is associated with important mental health and developmental outcomes such as anxiety (Pawijit, Likhitsuwan, Ludington, & Pisitsungkagarn, 2017; Regis, Ramos-Cerqueira, Lima, & Torres, 2018), depression (Paans, Bot, Brouwer, Visser, & Penninx, 2018) and self-esteem (Veldhuis, Alleva, Bij de Vaate, Keijer, & Konijn, 2020). In addition, it is a core symptom for the maintenance and prediction of Eating Disorders (Christian et al., 2020) and Body Dysmorphic Disorder (Ryding & Kuss, 2020).

Given the above, the aim of the study was to identify in the relationship between frequency of social media use (SM Freq.) and body (dis)satisfaction, the moderating role of following pages focused on physical appearance (FON) and to identify differences in levels of body (dis)satisfaction between those who follow these pages or not. The hypothesis of the study, based on previous findings (Saiphoo & Vahedi, 2019) is that this relationship is moderated by the type of page followed. Another hypothesis is that levels of body satisfaction will be higher in individuals who do not follow pages focused on physical appearance.

Method

Participants

The inclusion criterion for the study was to be Brazilian and older than 18 years of age. Initially, 702 individuals participated in the study. Of this sample, 28.9% ($n = 203$) were male and 71.1% ($n = 499$) were female. The mean age was 28.65 years (SD = 9.7; min. 18, max. 65). The majority lived in the following states: Rio de Janeiro ($n = 356$; 50.7%), São Paulo ($n = 114$; 16.2%), Pará ($n = 60$; 8.5%), Rio Grande do Sul ($n = 40$; 5.7%), Minas Gerais ($n = 29$; 4.1%), and Bahia ($n = 22$; 3.1%). Regarding color or race,

according to the IBGE classification, most of the sample declared themselves as white (n = 467; 66.5%), followed by brown (n = 173; 24.6%), black (n = 53; 7.5%), yellow/Asian (n = 6; 0.9%), and indigenous (n = 3; 0.4%). As for education, the most prevalent were "incomplete college education" (n = 264; 37.6%), "complete postgraduate" (n = 164; 23.4%), "complete college education" (n = 146; 20.8%), and "incomplete postgraduate" (n = 91; 13%).

Among the 203 male participants, 3% (n = 6) reported not accessing social networks, 1% (n = 2) reported accessing them monthly, 5.4% (n = 11) reported accessing them weekly, 31% (n = 63) reported accessing them 1 to 5 times a day, 26.6% (n = 54) reported accessing them 6 to 10 times a day, and 33% (n = 67) reported accessing them more than 10 times a day. Among the 499 female participants, 0.4% (n = 2) reported that they did not access social networks, 0.6% (n = 3) reported accessing them monthly, 2% (n = 10) reported accessing them weekly, and 28.9% (n = 144) reported accessing them 1 to 5 times a day, 25.5% (n = 127) reported accessing them 6 to 10 times a day, and 42.7% (n = 213) reported accessing them more than 10 times a day.

To contemplate the objectives of the study and to make the analyses executable, we chose to exclude participants who reported not accessing social networks, to exclude participants who reported accessing them monthly, and to exclude participants who reported accessing them weekly. This process resulted in a sample composed of 668 participants, 27.5% men (n = 184) and 72.5% (n = 484) women.

Next, the participants were categorized into two distinct groups. Those who reported following at least one of the pages "Celebrities, models, fashion/beauty bloggers, beauty pages, lifestyle" or "Health and Fitness (e.g., fitness bloggers and/or people/athletes, diet tips, workout tips, etc.)" fell into the category "people who follow social network pages whose content focuses on physical appearance. Participants who stated that they do not follow either of these two types of pages fell into the category "people who do not follow pages whose content focuses on physical appearance".

Among men, 47.3% (n = 87) did not follow the pages "Celebrities, models, fashion/beauty bloggers, beauty pages, lifestyle" or "Health and Fitness (ex: fitness bloggers and/or people/athletes, diet tips, training tips, etc.)" and 52.7% (n = 97) did. Among women, 21.7% (n = 105) did not follow the described pages and 78.3% (n = 379) did.

Instruments

Sociodemographic questionnaire: instrument designed for the study to collect relevant data for the general description and characterization of the sample (e.g., age, ethnicity, education), frequency of social media use, and types of pages accessed from three categories: "Celebrities, models, fashion/beauty bloggers, beauty pages, lifestyle," "Health and Fitness (e.g., fitness bloggers and or people/athletes, diet tips, training tips, etc.)," and "Travel, art, information, politics, science, etc.".

Body Satisfaction Situational Scale (ESSC): instrument developed by Hirata and Pilati (2010); originally composed of 23 items answered on a Likert scale, which assesses body satisfaction in men and women. It presents four factors: "dissatisfaction and fat", with items such as "I think I have too much fat on my body" and "I am unhappy with my belly"; "external parts", with items such as "I am satisfied with my hair" and "I am satisfied with my face"; "satisfaction and muscle", with items such as "In general, I am satisfied with my muscle definition" and "I like the width of my shoulders", and finally, the "lower parts" factor, with items such as "I am satisfied with the size of my buttocks" and "I am satisfied with the size of my hips". In the present study, we used the refined version of the instrument, consisting of 20 items. It had the following fit indices: $\chi 2$ = 746.301; $p < 0.001$; RMSEA 90% CI [0.067, 0.078]; CFI= 0.955; TLI= 0.948.

Procedures

Data collection. Data collection was conducted virtually through the Survey Monkey Platform. The recruitment of participants occurred through social networks and email groups. On the first page of the questionnaire, participants had access to the Free and Informed Consent Term (FICT). Only participants who checked the option favorable to participation took part in the survey.

Data analysis. Initially, descriptive statistical analyses were performed to identify the socio-demographic distribution of the sample. Then, Student's t-tests were conducted to verify mean differences between people who follow social network pages whose content focuses on aesthetics/physical appearance and people who do not. Differences were calculated for the scores of each factor of ESSC ("dissatisfaction and fat", "satisfaction and muscles", "lower parts" and "external parts" - Hirata & Pilati, 2010). For this, we used the SPSS program (*Statistical Package for the Social Sciences*) version 20.

Finally, moderation analyses were conducted to investigate to what extent following pages focused on physical appearance moderates the relationship between frequency of social network use and body (dis)satisfaction, measured by the four different ESSC factors (Hirata & Pilati, 2010). Thus, four models for women and four models for men were tested. The moderator variable was coded 0 for the category of respondents "people who do not follow pages whose content focuses on physical appearance" and 1 for the category "people who do not follow pages whose content focuses on physical appearance". The bootstrapping resampling procedure was implemented (5000 samples). For this, the program PROCESS 4.1 was used (Hayes, 2022).

Ethical Considerations

The study was approved by a certified Research Ethics Committee (CAAE 13138919.4.0000.5275) and followed the guidelines of Resolution 466/2012 of the Conselho Nacional de Saúde (Brazilian National Health Council). On the first page of the questionnaire, participants had access to the Free and Informed Consent Term (FICT), where they were informed about the confidentiality of the information obtained,

requirements to participate in the study, risks and benefits regarding participation, and all necessary ethical clarifications. Only participants who agreed to the FICT and marked the option favorable to participation took part in the study.

Results

For the male sample, no statistically significant differences were identified between participants who follow the pages related to aesthetic content/physical appearance and do not follow for any of the four factors that make up the ESSC (Hirata & Pilati, 2010). For the female sample, statistically significant differences were identified between the groups for the four factors that make up the instrument. The results are described in Figure 1.

Regarding moderation analysis, for women, the model that tested to verify in the relationship between frequency of social network use (SM Freq.) and "dissatisfaction and fatness", (dependent variable) the moderating role of following pages focused on physical appearance (FON) showed satisfactory fit indices $F(3, 480) = 6.40$; $p < .001$; $R^2 = 0.04$. The indices were also satisfactory for the models that included as dependent variable "Satisfaction and external parts" [$F(3, 480) = 6.34$; $p < .001$; $R^2 = 0.04$], "Satisfaction and muscle" [$F(3, 480) = 4.34$; $p = .005$; $R^2 = 0.03$], and "Satisfaction and lower parts" [$F(3, 480) = 6.33$; $p < .001$; $R^2 = 0.04$]. The results are described in Table 1.

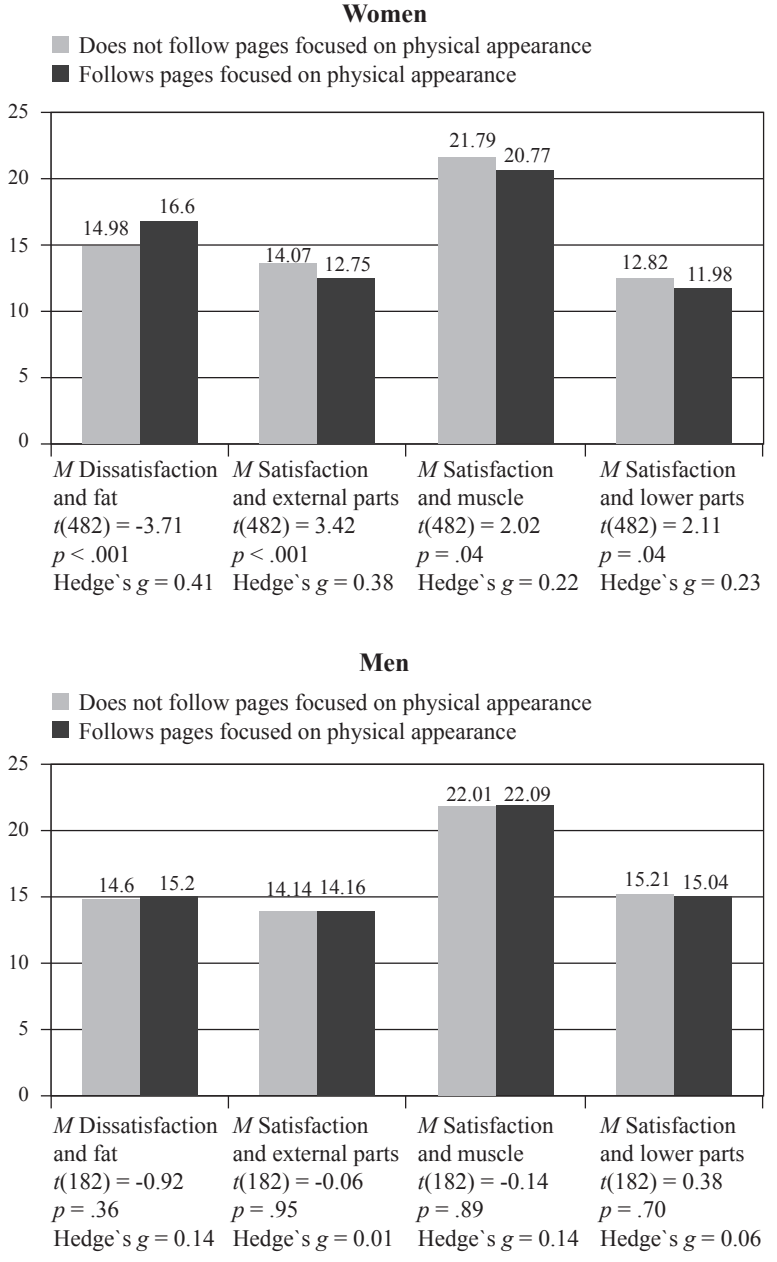

Figure 1. Tests comparing mean scores for each factor of the ESSC (Hirata & Pilati, 2010) between participants who follow pages focused on physical appearance and participants who do not.

Table 1
Effects of the moderation model for women

Variable	Coeficient (b)	Standard-Error	*t*	*p*	95%CI
Dissatisfaction and fat					
Constant	15.42	2.78	5.55	< .001*	[9.97, 28.88]
Freq. SM (x)	-0.09	0.56	-0.16	.87	[-1.19, 1.01]
FON (W)	-1.97	3.16	-0.62	.53	[-8.18, 4.24]
Freq. SM* FON (X*W)	0.75	0.63	1.19	.23	[-0.49, 1.99]
Satisfaction and external parts					
Constante	14.92	2.05	7.27	< .001*	[10.89, 18.95]
Freq. SM (x)	-0.18	0.42	-0.42	.67	[-0.99, 0.64]
FON (W)	0.75	2.34	0.32	.75	[-3.84, 5.34]
Freq. SM* FON (X*W)	-0.38	0.47	-0.82	.41	[1.30, 0.53
Satisfaction and muscle					
Constante	18.54	2.71	6.83	< .001*	[13.21, 23.87]
Freq. SM (x)	0.67	0.55	1.22	.23	[-0.41, 1.75]
FON (W)	6.19	3.09	2.00	.05*	[0.12, 12.26]
Freq. SM*FON (X*W)	-1.43	0.62	-2.32	.02*	[-2. 64, -0.22]
Conditional Effects (W)					
Does not follow** (0)	0.67	0.55	1.22	.23	[-0.41, 1.75]
Follows*** (1)	-0.76	0.28	-2.72	.01*	[-1.31, -0.21]
Satisfaction and lower parts					
Constant	9.96	2.10	4.74	< .01*	[5.83, 14.10]
Freq. SM (x)	0.59	0.43	1.38	.17	[-0.25, 1.42]
FON (W)	6.02	2.40	2.51	.01*	[1.32, 10.73]
Freq. SM*FON (X*W)	-1.35	0.48	-2.83	.01*	[-2.39, 0.41]
Conditional Effects (W)					
Does not follow** (0)	0.59	0.43	1.38	.17	[-0.25, 1.42]
Follows*** (1)	-0.77	0.22	-3.54	< .001*	[-1.1, -0.34]

Note. FON = Follow or do not follow pages focused on physical appearance; Freq. SM = Frequency of social network use; *statistically significant results at .05; **Does not Follow (pages focused on physical appearance); Follows** (pages focused on physical appearance).

Significant conditional effects were identified for "Satisfaction and muscle" and "Satisfaction and lower parts". When participants do not follow pages focused on physical appearance, the relationship between the frequency of social network use (SM Freq.) and "Satisfaction and muscle" is not significant (B = 0.67; p = .23). When the participants follow the pages, the relationship becomes negative and statistically significant (B = -0.76; p = .01). When participants do not follow pages focused on physical appearance, the relationship between frequency of social network use (SM Freq.) and "Satisfaction and lower parts" is not significant (B = 0.59; p = .17), when the participants follow the pages, the relationship becomes negative and statistically significant (B = -0.77; p < .001). The results are described in Figure 2.

For men, the models tested did not show satisfactory fit indices. For "Dissatisfaction and fat as dependent variable", the indices were: $F(3, 180) = 0.56$; p = .64; R^2 = 0.01. For "Satisfaction and external parts": $F(3, 180) = 0.21$; p = .89; R^2 = 0.00. For "Satisfaction and muscle": $F(3, 180) = 0.54$; p = .65; R^2 = 0.01. Finally, for "Lower parts": $F(3, 180) = 0.74$; p = .53; R^2 = 0.01. The results are described in Table 2.

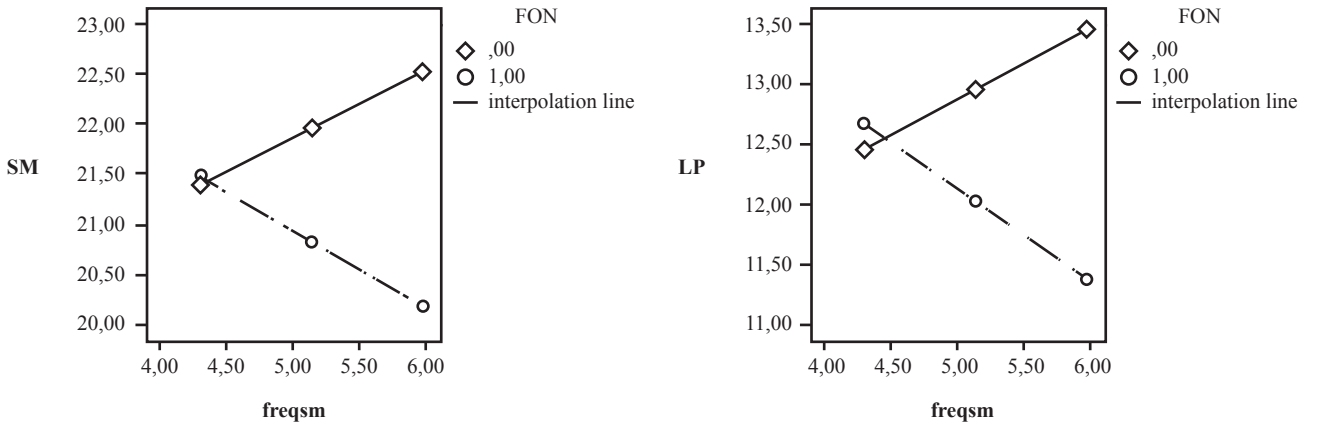

Figure 2. Conditional moderation effects for Satisfaction and muscle and Satisfaction and parts.
Note. SM = Satisfaction and muscle; LP = Lower parts; FON = Follow or do not follow pages focused on physical appearance; freqsm = frequency of social network use.

Table 2
Effects of the moderation model for men

Variable	Coeficient (*b*)	Standard-Error	*t*	*p*	**95%CI**
Dissatisfaction and fat					
Constant	17	2.93	5.80	< .001*	[11.22, 22.78]
Freq. SM (x)	-0.49	0.59	-0.83	.41	[-1.66, 0.68]
FON (W)	-2.90	4.02	-0.72	.47	[-10.83, 5.02]
Freq. SM* FON (X*W)	0.71	0.79	0.89	.38	[-0.86, 2.27]
Satisfaction and external parts					
Constant	12.60	2.12	5.96	< .001*	[8.43, 16.78]
Freq. SM (x)	0.32	0.43	0.74	.46	[-0.53, 1.16]
FON (W)	1.01	2.90	0.73	.73	[-4.71, 6.74]
Freq. SM* FON (X*W)	-0.21	0.57	0.72	.72	[-1.34, 0.92]
Satisfaction and muscle					
Constant	19.81	2.67	7.43	< .001*	[14.55, 25.07]
Freq. SM (x)	0.45	0.54	0.84	.40	[-0.61, 1.52]
FON (W)	4.65	3.66	1.27	.21	[-2.57, 11.86]
Freq. SM*FON (X*W)	-0.91	0.72	-1.26	.21	[-2. 33, 0.51]
Satisfaction and inferior parts					
Constant	16.94	1.94	8.74	< .001*	[13.11, 20.76]
Freq. SM (x)	-0.35	0.39	-0.90	.37	[-1.13, 0.42]
FON (W)	0.12	2.06	0.05	.96	[-5.13, 5.37]
Freq. SM*FON (X*W)	-0.04	0.52	-0.07	.95	[-1.07, 1.00]

Note. FON = Follow or do not follow pages focused on physical appearance; Freq. SM = Frequency of social network use; *statistically significant results in the parameter .05.

Discussion

Regarding the comparisons between the levels of body (dis)satisfaction among women who follow pages focused on aesthetics/physical appearance and those who do not, the participants who follow the mentioned pages showed significantly higher levels of dissatisfaction regarding aspects associated with body fat (eg: weight; belly) and lower levels of body satisfaction regarding muscles (eg: muscle definition), lower body parts (eg: buttocks) and external body parts (eg: face). This result is in agreement with previous reports indicating that social network use can have negative effects on body image (Mingoia, Hutchinson, Wilson, & Gleaves, 2017; Saiphoo & Vahedi, 2019)

For women, in moderation analyses, the variable "following pages focused on physical appearance" (FON)

showed moderation effects on the relationship between frequency of social network use (SM Freq.) and the variables "Satisfaction and muscle" and "Satisfaction and lower parts". The factor "Satisfaction and muscle" of the ESSC (Hirata & Pilati, 2010). refers, for example, to satisfaction in front of the thickness of the arms, weight, muscle definition and also included an overall satisfaction item. The factor "Satisfaction and lower parts" refers to satisfaction regarding buttocks, hip size, flabbiness, and cellulite (Hirata & Pilati, 2010). This finding reinforces the importance of using body image scales that measure (dis)satisfaction towards different parts of the body, not just global body (dis)satisfaction scales (Paterna, Alcaraz-Ibáñez, Fuller-Tyszkiewicz, & Sicilia, 2021). Accessing pages focused on physical appearance predicts greater dissatisfaction regarding certain physical attributes, such as muscle definition, buttocks, and the presence of cellulite. Thus, it can be said that for women, the content accessed matters.

In this study, one of the categories of pages focused on physical appearance that participants could indicate access or not was the category "Health and Fitness (e.g., fitness bloggers and or people/athletes, diet tips, workout tips, etc.)", in addition to "Celebrities, models, fashion/beauty bloggers, beauty pages, lifestyle". Ferguson, Brace-Govan, and Welsh (2021) investigate the complex contradictions of ideal body designs of female bodies in contemporary times often disseminated by social media and their "influencers," such as the celebrity Kardashians and "fitness" bloggers. Among the ambiguities, the ideal of thinness is associated with the muscular athletic ideal, prominent abdomen and large buttocks.

Thus, the ideal design involves levels of muscle hypertrophy associated with low rates of body fat and rounded buttocks (Ferguson et al., 2021). Although many of these pages are originally designed for the promotion of "healthy" lifestyles and motivation, there is evidence in the literature that links exposure to the "fitness" universe of social media to higher levels of body dissatisfaction (Cataldo et al., 2021; Ferguson et al., 2021; Tiggemann & Zaccardo, 2015). This process is mediated by upward social comparisons focused on physical appearance (Tiggemann & Zaccardo, 2015).

Regarding comparisons between levels of body (dis)satisfaction between men who follow aesthetic/ physical appearance focused pages and those who do not, no statistically significant mean differences were identified. This result differs in general from previous findings in the literature (Holland & Tiggemann, 2016; Saiphoo & Vahedi, 2019). Unlike traditional media, which primarily targets women, on social media, both men and women post idealized content, making them susceptible to social/body image deleterious comparisons. Thus, men and women are simultaneously influenced (Saiphoo & Vahedi, 2019). In Saiphoo and Vahedi's meta-analysis, for example, studies with larger proportions of women in their samples did not show larger effect sizes.

One hypothesis for this finding in the present study refers to possible protective characteristics of the male sample. A study by Mahon and Hevey (2021) sought to identify how adolescents process content on social networks associated with physical appearance and the coping strategies adopted. Among the results, it was identified that boys process content in a more positive way than girls, referring, for example, that "the models" viewed are motivating agents that encourage the search for personal change or referring to a perception that celebrities, athletes, and influencers dedicate their lives to the body/aesthetics. For adolescent males, digital content is perceived as a reality attainable through effort and hard work (Mahon & Hevey, 2021).

Another potentially protective characteristic relates to double standards in body assessment (Voges et al., 2019). Unlike women, men often overestimate their skills and characteristics (e.g., intelligence, physical appearance; Cooper, Krieg, & Brownell, 2018; Voges et al., 2019). Experimental research by Voges et al. (2019) identified that men also appreciate the prospect of having an ideal body. However, in contrast to women, they have the advantage of being adept at evaluating their own bodies in a way that is more favorable to themselves. If men evaluate a body feature as desirable, the presence of that feature in themselves is evaluated more positively than the presence of that feature in another man.

Still, in the moderation analyses, for the male sample, no model analyzed presented satisfactory fit indices. This finding may be associated with a weakness in the way access to pages focused on physical appearance was measured. Participants who stated that they follow "Celebrities, models, fashion/beauty bloggers, beauty pages, lifestyle" or "Health and Fitness (e.g., fitness bloggers and/or people/athletes, diet tips, training tips, etc.)" fell into the category "people who follow social network pages whose content focuses on physical appearance". The participants who stated that they do not follow these pages, fell into the category of those who do not follow this type of page. Given the goal of taking into account engagement with content focused on aesthetics/ physical appearance, other strategies may be more interesting in future studies, such as the use of psychometric instruments (Sigerson & Cheng, 2018), experimental studies (Saiphoo & Vahedi, 2019), and investigation of other variables, such as photo posting, photo editing, "likes," etc. (Tiggemann, Hayden, Brown, & Veldhuis, 2018; Tiggemann & Velissaris, 2020).

Another possibility is related to how the frequency of social network usage was measured. The intervals estimated in the study to investigate frequency of use, for example, may not accurately reflect the user's actual frequency of use. Instead of analyzing the number of times accessed per day, for example, the user can be asked to estimate the navigation time or choose to use psychometric scales about his or her engagement on the networks (e.g., intensity of use). On Instagram, for example, the user can view the daily time of use. Importantly, measuring these variables, despite the growing attention received in the last decade, has still

been a concern and a challenge for researchers. Self-report scales prove to be imprecise and in this context, methods based on data mining techniques (e.g. machine learning) may be useful (Sigerson & Cheng, 2018).

Finally, it is worth pointing out that the study presents some limitations in addition to those already addressed. Most of the participants had high educational levels in relation to the average of the Brazilian population, undermining the representativeness of the sample. Thus, future studies with more heterogeneous samples are suggested. Another limitation is the measurement of body image, since other dimensions of the construct could have been considered, such as the behavioral one. The study also has strengths, such as the inclusion of men and women in the sample and the measurement of satisfaction regarding different body parts, contributing to a field of study historically characterized by the use of global measures of body (dis)satisfaction (Paterna et al., 2021). Finally, this is the first or one of the first studies in the Brazilian context, as far as researchers are aware, with this objective and design.

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