

Body dissatisfaction and aesthetic procedures in students

Insatisfação corporal e procedimentos estéticos em estudantes universitários

Insatisfacción corporal y procedimientos estéticos en estudiantes universitarios

Alessa Sin Singer Brugiolo¹, Eveliny Rodrigues Santos², Pâmella Cristina Soares Ribeiro³, Fabiana Roberta Nunes Carnáuba⁴

ABSTRACT | Dissatisfaction with body image occurs when the individual wants his body to be different from his own perception. Young people tend to have concerns about the body that can affect their physical and psychological health. The study sought to identify the degree of body dissatisfaction and aesthetic procedures made by students. It is an observational and cross-sectional study that used a self-administered digital questionnaire sent by e-mail. Students aged 18 and over, regularly enrolled at the Universidade Federal de Juiz de Fora, *Campus* Governador Valadares (UFJF/GV) between January and March 2020 were included. There were 299 participants, 81.6% of whom were female, 68.2% with a family income of up to 4 minimum wages, 34.8% of the physiotherapy course, and 64.5% did not know Dermatofunctional Physical Therapy. 21.1% had already undergone an aesthetic procedure, and 85.3% reported a desire to perform aesthetic procedures. The desired procedures were mainly to reduce localized fat, with lack of money being the main obstacle. Body Shape Questionnaire (BSQ-8) was used to evaluate body dissatisfaction. 33.4% of the participants show no dissatisfaction, and 14.8% reported severe dissatisfaction. There was an association between body dissatisfaction and whether each individual would like to perform an aesthetic procedure, and in all BSQ-8 categories, the answer yes was more frequent. Despite the low degree of body dissatisfaction found, part of the participants showed severe dissatisfaction, highlighting the need to promote educational actions on the idealization

of body image, in order to avoid negative impacts on individuals' physical and mental health.

Keywords | Body Image; Students; Physiotherapy; Aesthetics.

RESUMO | A insatisfação com a imagem corporal ocorre quando o indivíduo deseja que seu corpo seja diferente da forma como o percebe. Os jovens, nesse contexto, tendem a apresentar preocupações com o corpo que podem afetar sua saúde física e psicológica. Este estudo objetivou identificar o grau de insatisfação corporal e possíveis intervenções estéticas feitas por universitários. Trata-se de um estudo observacional e transversal feito a partir de um questionário digital autoaplicável enviado por e-mail. Foram incluídos na pesquisa discentes a partir de 18 anos, regularmente matriculados na Universidade Federal de Juiz de Fora, *campus* Governador Valadares (UFJF/GV) entre janeiro e março de 2020. Participaram 299 discentes: 81,6% são do sexo feminino; 68,2% têm renda familiar de até quatro salários mínimos; 34,8% cursavam fisioterapia; 64,5% eram pessoas que desconheciam a Fisioterapia Dermatofuncional; 21,1% eram indivíduos que já haviam realizado algum procedimento estético; e 85,3% relataram vontade de realizar procedimentos estéticos principalmente relacionados à redução da gordura localizada, sendo a falta de dinheiro o principal obstáculo para a realização dos procedimentos desejados. Sobre a insatisfação corporal, avaliada através do *Body Shape Questionnaire* (BSQ-8), 33,4% dos participantes

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¹Universidade Federal de Juiz de Fora (UFJF) – Governador Valadares (MG), Brazil. E-mail: alessa.brugiolo@ufjf.edu.br. ORCID-0000-0003-3525-840X

²Universidade Federal de Juiz de Fora (UFJF) – Governador Valadares (MG), Brazil. E-mail: evelinyrodrigues@hotmail.com. ORCID-0000-0003-3268-602X

³Universidade Federal de Juiz de Fora (UFJF) – Governador Valadares (MG), Brazil. E-mail: pamellawrd@hotmail.com. ORCID-0000-0003-2806-8843

⁴Universidade Federal de Juiz de Fora (UFJF) – Governador Valadares (MG), Brazil. E-mail: fabinunes@gmail.com. ORCID-0000-0002-6443-6626

apresentaram “nenhuma preocupação com a forma” e 14,8%, “acentuada preocupação com a forma”. Foi possível associar insatisfação corporal e a vontade de realizar algum procedimento estético com maior frequência entre os participantes que responderam sim em todas as classificações do BSQ-8. Apesar do baixo grau de insatisfação corporal entre a maioria dos participantes, uma parcela deles apresentou acentuada preocupação com a forma, destacando-se a necessidade de promover ações educativas para evitar impactos negativos na saúde física e mental.

Descritores | Imagem Corporal; Estudantes; Fisioterapia; Estética.

RESUMEN | La insatisfacción con la imagen corporal es un sentimiento que las personas experimentan cuando su cuerpo no cumple con las expectativas percibidas. En este contexto, los jóvenes tienden a preocuparse por su cuerpo, lo cual puede afectar su salud física y psicológica. Este estudio tuvo como objetivo identificar el grado de insatisfacción corporal y las posibles intervenciones estéticas realizadas por estudiantes universitarios. Este es un estudio observacional y transversal, que se basó en un cuestionario digital enviado por correo electrónico. En el estudio se incluyeron a estudiantes de más de 18 años de edad, matriculados regularmente

en la Universidad Federal de Juiz de Fora, campus Governador Valadares (UFJF/GV), Brasil, entre enero y marzo de 2020. De los 299 estudiantes participantes: el 81,6% son mujeres; el 68,2% tienen renta familiar de hasta cuatro salarios mínimos; el 34,8% estudian fisioterapia; el 64,5% desconocen la fisioterapia dermatofuncional; el 21,1% informó haber sometido a algún procedimiento estético; y el 85,3% refirió estar dispuesto a realizar procedimientos estéticos, principalmente relacionados con la reducción de grasa localizada, pero la falta de dinero era el principal obstáculo para realizarlos. En cuanto a la insatisfacción corporal evaluada por el Body Shape Questionnaire (BSQ-8), el 33,4% de los participantes mostraron “ninguna preocupación por la forma” y el 14,8%, “marcada preocupación por la forma”. La insatisfacción corporal estuvo asociada con mayor frecuencia con la intención de realizar algún procedimiento estético entre los participantes que respondieron a sí a todas las clasificaciones del BSQ-8. A pesar de que la mayoría de los participantes presentaron bajo grado de insatisfacción corporal, parte de ellos mostró una marcada preocupación por la forma, lo que apunta a la necesidad de promover acciones educativas para evitar impactos negativos en la salud física y mental de esta población.

Palabras clave | Imagem Corporal; Estudantes; Fisioterapia; Estética.

INTRODUCTION

Body image is defined by Slade as “the figure we have in mind of the size and shape of our bodies”¹. However, Hosseini and Padhy² argue that it is dynamic and can change with age, mood or even clothing.

In recent years, there has been a shift from normative beauty standards. Frois, Moreira and Stengel³ highlight a considerable increase in concern with body image. Thus, body dissatisfaction tends to be increasingly recurrent and constant⁴, that is, the individuals want their body to be different from the way they perceive it⁵.

According to data from the 2018 Census of the Brazilian Society of Plastic Surgery (SBCP), non-surgical procedures increased considerably between 2014 and 2018, while surgical procedures decreased from 82.6% to 50.1%⁶.

Given the growth of non-surgical aesthetic interventions, the importance of a trained professional to work in this area is clear. In this sense, Resolution No. 362, of May 20, 2009, of the Federal Council of Physiotherapy and Occupational Therapy (COFFITO)⁷ recognized Dermatofunctional Physiotherapy as a specialty of Physiotherapists. However, a recent study

showed that more than 70% of respondents were unaware of this specialty⁸.

Although the growth in the number of people with body dissatisfaction and non-surgical aesthetic interventions is remarkable⁹, there is a limitation in most studies on the concern with the body regarding the factors that lead individuals to this dissatisfaction, which certainly reduces the possibilities of exploring body image dysfunctions. Therefore, it is extremely important to assess these aspects, and self-administered questionnaires and scales are the most used instruments for this purpose¹⁰. The application of the Body Shape Questionnaire (BSQ-8) is highlighted, commonly used to assess body concerns and dissatisfaction¹¹, as it has specific questions concerning image, body and related feelings.

In general, with identities and bodies in constant change, young people are a vulnerable group to sociocultural influences and tend to have concerns about the body¹². Considering that changes in body image can affect the individual's physical and psychological health², this study seeks to identify the degree of body dissatisfaction and possible aesthetic interventions in students at the Universidade Federal de Juiz de Fora, campus Governador Valadares (UFJF/GV).

METHODOLOGY

The research used a self-applicable digital form via Google Forms platform. Participants had access to the survey through an email sent directly by the course coordinators, with basic explanations and a link for participation. When visiting the indicated email address, they read the informed consent form. Those who accepted to participate, by clicking on “agree”, were directed to questions prepared by the researchers about sociodemographic data, aesthetic procedures already performed, intention to perform them and reasons why they have not yet performed them. In addition, there were questions regarding knowledge about Dermatofunctional Physiotherapy. Following, they answered the BSQ-8 questions. This instrument was originally developed by Cooper et al.¹³ and validated for Brazilians by Conti, Cordás and Latorre¹⁴. All eight questions contain six answer choices, each equivalent to a certain score ranging from 1 to 6. The sum of the points of all answers allows us to assess the level of concern with body image. These scores are converted into 4 descriptive categories: “no concern with shape”, “mild concern with shape”, “moderate concern with shape” and “marked concern with shape”. After answering the BSQ-8, participation in the survey was terminated.

The collected data were archived and analyzed in Microsoft Excel® 2020 and PSPP version 1.0.1 programs. A descriptive analysis of the variables was conducted to characterize the population studied, with descriptive tables with absolute frequency and percentage for categorical variables being presented. Categorical variables were analyzed using the chi-square test to verify whether the proportion between the sample groups was evenly distributed. The association between the studied variables was verified using Pearson’s chi-square test. In both tests, a value of $p < 0.05$ was considered statistically significant.

RESULTS

There were 299 students from UFJF/GV who participated in the research, 81.6% female and 68.2% with a family income of 1 to 4 minimum wages (Table 1). Due to a flaw, the age of each participant was not collected, however, the general average age of all university students enrolled at UFJF/GV during the study period was 23 years, with a standard deviation of 5.1 years.

Table 1. Sex and family income of participants

| Sex | N | % | p |
|---|-----|------|--------|
| Female | 244 | 81.6 | 0.000* |
| Male | 55 | 18.4 | |
| Family income** | | | |
| Up to two minimum wages (BRL 2,078.00) | 102 | 34.1 | 0.000* |
| From two to four minimum wages (BRL 2,079.00 to BRL 4,156.00) | 102 | 34.1 | |
| From four to ten minimum wages (BRL 4,157.00 to BRL 10,390.00) | 65 | 21.7 | |
| From ten to twenty minimum wages (BRL 10,390.00 to BRL 20,780.00) | 28 | 9.4 | |
| Above twenty minimum wages (above BRL 20,780.00) | 2 | 0.7 | |
| TOTAL | 299 | 100 | |

N: Number of participants.

* $p < 0.05$; **The minimum wage in January 2020 was R\$ 1,039.00.

Most participants were enrolled in health courses (64.9%), with the majority taking a degree in physiotherapy (34.8%), followed by pharmacy (9.6%), nutrition (8.4%), physical education (7.4%), medicine (2.7%) and dentistry (2.0%). The other students were from courses in the area of applied social sciences, with the highest number of participants in the law course (22.4%), followed by courses in administration (6.4%), economic sciences (4.3%) and accounting sciences (2.0%). In relation to the period in which they were enrolled, the participation of students from the sixth to the eighth periods was greater, totaling 36.4% of the participants.

Regarding aesthetic procedures, most students reported never having done it, however, when asked if they would like to do it, most responded positively. As for the participants’ knowledge about Dermatofunctional Physiotherapy, 64.5% claimed not to know this physiotherapist’s area of expertise (Table 2).

Table 2. Performing aesthetic procedures and students’ knowledge of Dermatofunctional Physiotherapy

| Have you already gone through any aesthetic procedure? | N | % | p |
|--|-----|------|--------|
| Yes | 63 | 21.1 | 0.000* |
| No | 236 | 78.9 | |
| Would you like to perform a aesthetic procedure? | | | |
| Yes | 255 | 85.3 | 0.000* |
| No | 44 | 14.7 | |
| Do you know Dermatofunctional Physiotherapy? | | | |
| Yes | 106 | 35.5 | 0.000* |
| No | 193 | 64.5 | |
| TOTAL | 299 | 100 | |

N: Number of participants.

* $p < 0.05$.

When participants who answered affirmatively to the question “Would you like to perform any aesthetic procedure?” were asked about the purposes of the aesthetic procedures they would like to perform, being able to describe how many they wanted, procedures for localized fat reduction were most mentioned. Furthermore, lack of money was reported as the main obstacle for not carrying out the desired aesthetic interventions (Table 3).

Table 3. Purposes and obstacles for carrying out aesthetic procedures

| For what purposes would you like to perform a aesthetic procedure?* | N | % |
|---|-----|------|
| Decrease in localized fat | 135 | 21.1 |
| Stretch mark treatment | 95 | 14.8 |
| Cellulite treatment | 90 | 14.1 |
| Reduction of skin blemishes | 80 | 12.5 |
| Weight reduction | 77 | 12.0 |
| Face-lift | 41 | 6.4 |
| Other purposes | 122 | 19.1 |
| TOTAL | 640 | 100 |
| What prevents you from carrying out the procedures you want?* | N | % |
| Lack of money | 239 | 49.6 |
| Fear of not getting a good result | 84 | 17.4 |
| Not knowing a reliable place | 47 | 9.7 |
| Fear of pain | 36 | 7.5 |
| Lack of time | 25 | 5.2 |
| Other purposes | 51 | 10.6 |
| TOTAL | 482 | 100 |

N: Number of responses.

*Participants could cite more than one answer on this question.

With regard to the application of the BSQ-8 questionnaire, 33.4% of the participants were classified in the category “no concern with shape” (Table 4). Participants classified in the category “marked concern with shape” represented 14.8% of the sample, with 89.5% female and 97.9% reporting the desire to perform aesthetic procedures. Of these, 31.2% had already undergone some aesthetic procedure and the most reported family income was “two to four minimum wages” (43.8%). When asked about “what prevents them from performing aesthetic procedures”, the most cited answer was “lack of money” (89.5%).

Table 4. Classification of body dissatisfaction using the BSQ-8 questionnaire

| BSQ-8 classification | N | % | p |
|-----------------------------|-----|------|--------|
| No concern about shape | 100 | 33.4 | 0.000* |
| Mild concern with shape | 77 | 25.8 | |
| Moderate concern with shape | 78 | 26.0 | |
| Marked concern with shape | 44 | 14.8 | |
| TOTAL | 299 | 100 | |

BSQ-8: Body Shape Questionnaire; N: number of participants.

*p<0.05

When evaluating the association between body dissatisfaction, according to the classification in the BSQ-8, and the other variables, no statistically significant differences were observed with regard to sex (p=0.482), family income (p=0.354), if has already undergone any aesthetic procedure (p=0.118), if knows Dermatofunctional Physiotherapy (p=0.734) and the course enrolled in (p=0.839), and for the latter analysis, the courses were grouped into two categories: health care courses and applied social sciences courses. A statistically significant difference was observed regarding the association between body dissatisfaction and whether they would like to undergo any aesthetic procedure (p=0.002), with a higher frequency of participants who answered yes to this question in all BSQ-8 classifications (Table 5).

Table 5. Association between body dissatisfaction and whether they would like to undergo any aesthetic procedure

| BSQ-8 | Would you like to perform a aesthetic procedure? | | p |
|-----------------------------|--|-------------|--------|
| | YES N (%) | NO N (%) | |
| No concern about shape | 76 (25.4) | 24 (8.0) | 0.002* |
| Mild concern with shape | 65 (21.8) | 12 (4.0) | |
| Moderate concern with shape | 71 (23.8) | 7 (2.3) | |
| Marked concern with shape | 43 (14.4) | 1 (0.3) | |

BSQ-8: Body Shape Questionnaire; N: number of participants.

*p<0.05

DISCUSSION

The present study evaluated the degree of body dissatisfaction and aesthetic procedures made by students, with most respondents being female. Similar results were found by Silva et al.¹⁵, who also identified the prevalence of body dissatisfaction among university students, with a predominance of women aged from 18 to 23. The greater participation of women in surveys is possibly related to behavioral differences between the sexes. Notably, this can be attributed to the more collaborative behavior of women when compared to men¹⁶.

As for economic factors, the most selected answers during this research were the options of lower family income, results similar to the study by Costa and Vasconcelos¹⁷, which evaluated factors related to body dissatisfaction in female university students at a public institution in Santa Catarina.

Regarding aesthetic procedures, most participants reported never having performed aesthetic procedures, however, a large part showed interest in them. With regard to the first

statement, it may be associated with the general average age of university students enrolled in the institution during the study period, classified as young adults, which indicates a lower possibility of having already undergone any aesthetic procedure. There was also a significant association between all categories in the classification of body dissatisfaction with the desire to perform some aesthetic procedure, that is, most participants showed willingness to perform aesthetic procedures, regardless of the degree of body dissatisfaction presented in the BSQ-8. According to Borba and Thives¹⁸, people associate their well-being with a condition that can be acquired and experienced through aesthetic and surgical procedures. Vanity and self-esteem are directly related to the desire to perform aesthetic surgical and non-surgical procedures¹⁹, which may have influenced the response of the participants. These facts could justify the interest in these procedures. With regard to the area of Dermatofunctional Physiotherapy, a minority of students showed knowledge about this area of physiotherapist performance, demonstrating ignorance of the importance of this professional who plays a relevant role in the postoperative period, in addition to standing out in the performance of non-invasive aesthetic procedures, which are increasingly sought due to their lower cost and easier execution²⁰.

Additionally, it was observed that the number of students satisfied with their body image was higher than that of dissatisfied, representing a positive fact, considering that dissatisfaction with their body image can have negative consequences, affecting the individual's physical and psychological health².

The results of this study corroborate the results found by Miranda et al.²¹, who used the BSQ in its original version to assess university students at UFJF and observed that 89.9% of them did not have body dissatisfaction. Recently, Cardoso et al.²² evaluated the prevalence of body dissatisfaction among university students in the health area and found similar results, with regard to the greater participation of female students and a low rate of body dissatisfaction.

It is important to highlight that, despite the positive result of students satisfied with their body image, 14.8% of respondents showed marked concern with their shape, which is alarming. Alvarenga et al.²³ stated that the beauty standard created by the media is restricted and undemocratic, generating, especially in women, the desire to adapt to it. Although 10 years have passed, this statement is still relevant, as the vast majority of dissatisfied participants in the study were women. Similar data were found in studies carried out by Ferrari et al.²⁴ and Poltronier

et al.⁴, in which the rate of body dissatisfaction among women was also higher than among men.

Finally, the survey had some limitations, such as the fact that the age of respondents was not collected and the sample was relatively small, representing about 10% of students enrolled at UFJF/GV during the study period. It is suggested that further research be carried out on the subject, especially in specific groups, such as young adults, in order to develop educational actions to guide and assist students in order to prevent body dissatisfaction and its harmful consequences.

CONCLUSION

The results of this research showed the degree of body dissatisfaction among students at the UFJF/GV was low, with the sample being primarily composed of women with a lower family income. Most participants reported never having performed aesthetic procedures, despite showing interest in them. Procedures related to the reduction of localized fat were the most mentioned, with lack of money being identified as the main obstacle for not carrying out the desired aesthetic interventions. In addition, there is a lack of knowledge of students regarding Dermatofunctional Physiotherapy. Despite the low degree of body dissatisfaction in most students, part of the participants showed marked concern with shape, highlighting the need for educational actions and information on the idealization of body image so that the negative impacts on the physical and mental health of these individuals are avoided.

REFERENCES

1. Slade P. What is body image? *Behav Res Ther.* 1994;32(5): 497-502. doi: 10.1016/0005-7967(94)90136-8.
2. Hosseini SA, Padhy RK. *Body image distortion.* Treasure Island: StatPearls; 2020.
3. Frois E, Moreira J, Stengel M. Mídias e a imagem corporal na adolescência: o corpo em discussão. *Psicol Estud.* 2011;16(1):71-7.
4. Poltronieri TS, Tusset C, Gregoletto MLO, Cremonese C. Insatisfação com a imagem corporal e fatores associados em mulheres do sul do Brasil. *Cienc Saude.* 2016;9(3):128-34. doi: 10.15448/1983-652X.2016.3.21770.
5. Dumith S, Menezes AMB, Bielemann RM, Petresco S, Silva ICM, Linhares RS, et al. Insatisfação corporal em adolescentes: um estudo de base populacional. *Cien Saude Colet.* 2012;17(9): 2499-505. doi: 10.1590/S1413-81232012000900030.
6. Sociedade Brasileira de Cirurgia Plástica. *Censo 2018: Análise comparativa das pesquisas 2014, 2016 e 2018 [Internet].*

- São Paulo: SBCP; 2016 [cited 2021 Sep 13]. Available from: http://www2.cirurgiaplastica.org.br/wp-content/uploads/2019/08/Apresentac%CC%A7a%CC%83o-Censo-2018_V3.pdf
7. Conselho Federal de Fisioterapia e Terapia Ocupacional (BR). Resolução nº 362, de 20 de maio de 2009: reconhece a Fisioterapia Dermato-Funcional como especialidade do profissional Fisioterapeuta e dá outras providências. Diário Oficial da União. 2009 Jun 16;1:41-2.
 8. Souza APT, Biella MS, Albino MP, Vicente E, Minetto AI. Reconhecimento da atuação da fisioterapia dermatofuncional de indivíduos do extremo Sul catarinense. Rev Fisioter Reabil. 2017;1(1):24-33.
 9. Timerman F, Scagliusi FB, Cordás TA. Acompanhamento da evolução dos distúrbios de imagem corporal em pacientes com bulimia nervosa, ao longo do tratamento multiprofissional. Arch Clin Psychiatry. 2010;37(3):113-7. doi: 10.1590/S0101-60832010000300004.
 10. Miranda VPN, Conti MA, Bastos R, Ferreira MEC. Insatisfação corporal em adolescentes brasileiros de municípios de pequeno porte de Minas Gerais. J Bras Psiquiatr. 2011;60(3):190-7. doi: 1590/S0047-20852011000300007.
 11. DiPietro M, Silveira DX. Validade interna, dimensionalidade e desempenho da escala Body Shape Questionnaire em uma população de estudantes universitários brasileiros. Rev Bras Psiquiatr. 2009;31(1):21-4. doi: 10.1590/S1516-44462008005000017.
 12. Souza AC, Alvarenga MS. Insatisfação com a imagem corporal em estudantes universitários – Uma revisão integrativa. J Bras Psiquiatr. 2016;65(3):286-99. doi: 10.1590/0047-2085000000134.
 13. Cooper PJ, Taylor MJ, Cooper Z, Fairburn CG. The development and validation of the body shape questionnaire. Int J Eat Disord. 1987;6(4):485-94.
 14. Conti MA, Cordás TA, Latorre MRDO. Estudo de validade e confiabilidade da versão brasileira do Body Shape Questionnaire (BSQ) para adolescentes. Rev Bras Saude Matern Infant. 2009;9(3):331-8. doi: 10.1590/S1519-38292009000300012.
 15. Silva LPR, Tucan ARO, Rodrigues EL, Del Ré PV, Sanches PMA, Bresan D. Insatisfação da imagem corporal e fatores associados: um estudo em jovens estudantes universitários. Einstein (Sao Paulo). 2019;17(4):1-7. doi: 10.31744/einstein_journal/2019AO4642.
 16. Capraro V. Women are slightly more cooperative than men (in one-shot prisoners dilemma games played online). SSRN Electron J. 2018. doi: 10.2139/ssrn.3182429.
 17. Costa LCF, Vasconcelos FAG. Influência de fatores socioeconômicos, comportamentais e nutricionais na insatisfação com a imagem corporal de universitárias em Florianópolis, SC. Rev Bras Epidemiol. 2010;13(4):665-76. doi: 10.1590/S1415-790X2010000400011.
 18. Borba TJ, Thives FM. Uma reflexão sobre a influência da estética na auto estima, auto-motivação e bem estar do ser humano. Balneário Camboriú: UNIVALI; 2010.
 19. Strehlau VI, Claro DP, Laban Neto SA. A vaidade impulsiona o consumo de cosméticos e de procedimentos estéticos cirúrgicos nas mulheres? Uma investigação exploratória. Rev Adm (Sao Paulo). 2015;50(1):73-88. doi: 10.5700/rausp1185.
 20. Borges DVM, Cruz Z, Migliaccio V. Contribuições da drenagem linfática no pós operatório de cirurgias estéticas. Porto Velho: Centro Universitário São Lucas; 2018.
 21. Miranda VPN, Filgueiras JF, Neves CM, Teixeira PC, Ferreira MEC. Insatisfação corporal em universitários em diferentes áreas de conhecimento. J Bras Psiquiatr. 2012;61(1):25-32. doi: 10.1590/S0047-20852012000100006.
 22. Cardoso L, Niz LG, Aguiar HTV, Lessa AC, Rocha MES, Rocha JSB, et al. Insatisfação com a imagem corporal e fatores associados em estudantes universitários. J Bras Psiquiatr. 2020;69(3):156-64. doi: 10.1590/0047-2085000000274.
 23. Alvarenga MS, Philippi ST, Lourenço BH, Sato PM, Scagliusi FB. Insatisfação com a imagem corporal em universitárias brasileiras. J Bras Psiquiatr. 2010;59(1):44-51. doi: 10.1590/S0047-20852010000100007.
 24. Ferrari EP, Gordia AP, Martins CR, Silva DA, Quadros TM, Petroski EL. Insatisfação com a imagem corporal e relação com o nível de atividade física e estado nutricional em universitários. Motricidade. 2012;8(3):52-8. doi: 10.6063/motricidade.8(3).1156.