

Body image dissatisfaction among rural population: a systematic review Insatisfacción con la imagen corporal en población rural: una revisión sistemática

Francelia García-Mendoza ^a

Abstract:

Introduction: Body image dissatisfaction, a risk factor for eating disorders, is no longer a phenomenon exclusive to developed countries or urbanized areas: the trend shows its expansion to other social sectors. **Study objective:** The aim was to review the researches that have studied the presence of body image dissatisfaction in population from rural areas, describing both their methodology and the results obtained. A systematic review was carried out in PubMed, Google Scholar and Scopus, using key words such as: "body image dissatisfaction", "rural population", "eating disorders". **Results:** Twenty-seven papers that complied the following inclusion criteria were reviewed: original articles published in English or Spanish that, among their results, measure body image dissatisfaction among the participants in their sample, of any gender and age as long as they belong to a rural area; studies with any methodology (qualitative or quantitative) as long as the sample size was $n \geq 10$. All reported body image dissatisfaction, mainly tending to thinness. **Conclusion:** It is important to consider the contributions of the works presented here, pointing out the need to implement intervention strategies also aimed at rural populations.

Keywords:

Body image dissatisfaction, rural population, eating disorders

Resumen:

Introducción: La insatisfacción con la imagen corporal, factor de riesgo para el desarrollo de trastornos alimentarios, ya no es un fenómeno exclusivo de países desarrollados o de zonas urbanizadas: la tendencia muestra su expansión hacia otros sectores sociales. **El objetivo fue** revisar las investigaciones que han estudiado la presencia de insatisfacción con la imagen corporal en población perteneciente a áreas rurales, describiendo tanto su metodología como los resultados obtenidos. Se realizó una revisión sistemática en PubMed, Google Scholar y Scopus, mediante palabras clave como: "insatisfacción con la imagen corporal", "población rural", "trastornos alimentarios". **Resultados:** Se revisaron 27 trabajos que cumplieron con los siguientes criterios de inclusión: artículos originales publicados en inglés o en español que, entre sus resultados, midan insatisfacción con la imagen corporal entre los participantes de su muestra, de cualquier género y edad siempre y cuando pertenezcan a un área rural; estudios con cualquier metodología (cualitativa o cuantitativa) siempre y cuando el número de muestra fuese $n \geq 10$. En todos se reportó la existencia de insatisfacción con la imagen corporal, principalmente con tendencia a la delgadez. **Conclusión:** Es importante considerar las aportaciones de los trabajos que aquí se presentan, señalando la necesidad de implementar estrategias de intervención dirigidas de igual manera a poblaciones rurales.

Palabras Clave:

Insatisfacción con la imagen corporal, población rural, trastornos alimentarios

INTRODUCTION

Body image dissatisfaction is closely linked to eating disorders, because it is a variable that can predict, maintain, or regulate such disorders.^{1,2}

Body image is the mental representation that a person makes of his or her own body, involving feelings, attitudes and behaviors.³ Dissatisfaction with this body image arises from the belief that some parts of the body, related to shape and weight,

are unacceptable because those are considered disproportionate.⁴ Because of the discomfort this dissatisfaction causes, people tend to engage in conducts that can compromise their health, such as prolonged fasting, restrictive dieting, compulsive exercise, laxative use, etc., in order to change their perceived image. These risk behaviors are the antecedent of eating disorders.⁵

Several instruments have been used to measure body image dissatisfaction, however the best known is the Figure Rating

a Corresponding author, Departamento de Psicopedagogía. Plantel Azteca Hidalgo. Av. Melchor Ocampo, S/N., San Francisco 1ra., Tepeji del Río de Ocampo, Hgo. C.P. 42854, <https://orcid.org/0000-0003-0308-4935>, Email: francelia812@gmail.com

Scale (FCS), developed by Stunkard, Sorensen, & Schulsinger (1993), which consists of nine silhouettes of different sizes, from which participants choose the figure they identify with and the one they would like to have, that is, the perceived figure and the desired figure. Based on these discrepancies, the presence of dissatisfaction is obtained, which can be: positive dissatisfaction (having a thinner figure) or negative dissatisfaction (having a more robust figure).⁶

Body image dissatisfaction has been studied mainly in the female population of high socioeconomic strata and more urbanized regions, because they are the group that has reported the highest prevalence of eating disorders,⁷ however, due to the current acculturation process characterized by transformations and mutual influences between the different contexts,⁸ together with the rise of mass media, concern about body weight and shape is no longer an exclusive phenomenon of developed countries or urbanized areas: the trend shows its expansion towards other social sectors.^{9,10}

The aim of this paper is to review the researches that have studied the presence of body image dissatisfaction in population from rural areas, describing both its methodology and the results obtained.

METHODS

The review included articles published in PubMed, Google Scholar and Scopus. Keyword groups were used, such as: "body image dissatisfaction", "rural population", "eating disorders". The search was limited to those primary studies that complied the following inclusion criteria; original articles published in English or Spanish that, among their results, measure body image dissatisfaction among the participants in their sample, of any gender and age as long as they belong to a rural area; studies with any methodology (qualitative or quantitative) only if the sample size was $n \geq 10$. Studies were excluded that, despite containing the search terms, did not provide significant information on the topic and/or did not address the topic of interest, for example, studies conducted on populations in urban areas or studies that did not specify the place of application. Based on the criteria and available resources, the search for primary studies was conducted.

The review, classification and synthesis of the selected works was carried out through the elaboration of a matrix that included: name of the author, date of publication and country, the objective of the research, the size of the sample studied, the instrument to measure the variable of interest, and the results of the study. Finally, the analysis of the data was carried out.

RESULTS

According to the search carried out, 158 works related to the subject were found. From these, 126 were discarded because the study population was from an urban area or without specifying the rurality criterion. Likewise, three were discarded because they were systematic review studies, and two more because they were case studies. Once reviewed, 27 papers were selected that met the above-mentioned inclusion criteria.

Characteristics of the studies

The selected studies have diverse origins, with the majority of the work being carried out in the United States of America¹¹⁻¹⁶, Mexico,¹⁷⁻²⁶ and Africa.²⁷⁻³¹ To a lesser extent, works from Australia,³² Canada,³³ Spain,³⁴ China,³⁵ Chile,³⁶ and India.³⁷ The study sample, in the majority of the works (52% of the total), was made up of only women, mainly in reproductive age, with ages ranging from 18 to 50 years. In thirteen works (48%) the participants were both sex, whose age range was from 8 to 21 years; children and adolescent students. The sample size was also variable, with the smallest size being 18 participants³⁴ and 1,504 being the largest sample size.²¹

In terms of methodology, these are descriptive, comparative and cross-sectional studies. Of the total, 74% were quantitative studies, 7% qualitative, and 19% with mixed methodology.

Variable: body image dissatisfaction

For body image dissatisfaction measurement, the most commonly used instrument was the Figure Rating Scale (FRS), either for adults, adolescents or children, reported in 14 studies (52% of the total); the second most frequently reported instrument was the Body Shape Questionnaire (BSQ), used in three studies (11%) and the third one was the in-depth interview used in two studies (9%); other instruments used were the Body Dissatisfaction Scale (BDS), the Adolescent Body Image Satisfaction Scale (ABISS), the Eating Attitudes Scale-26 (EAT-26), the Eating Disorder Inventory-2 (EDI-2), the IMAGE questionnaire, Personal Satisfaction and Self-Satisfaction Scale, and the Questionnaire adapted from Personal Wellness Profile (PWP), which represent the remaining 37% of the body image dissatisfaction scales.

Although the presence of body dissatisfaction in the study sample was identified in all of the studies reviewed, the presentation of the results is variable, being grouped mainly in three forms: 1) dissatisfaction in general; 2) dissatisfaction with tendency to thinness; 3) dissatisfaction with tendency to thinness as well as dissatisfaction with desires for a more robust figure. Table 1 shows the number of studies that report body dissatisfaction, according to the classification mentioned above.

Table 1. Frequency of studies according to the results they report.

<i>Results</i>	<i>No. of Studies</i>	<i>Percent</i>
Dissatisfaction, with a tendency to thinness.	11	41%
Dissatisfaction, in general.	9	33%
Dissatisfaction with a tendency to thinness, as well as dissatisfaction with desires for a more robust figure.	7	26%
	27	100%

Source: Own elaboration.

In most of the studies found, the percentage of the study sample that presented body dissatisfaction ranged from 50% to 85% of the participants. Only in four studies,^{13,21,34,35} dissatisfaction occurred in less than 50% of the sample, in percentages ranging from 20% to 45%.

Regarding gender, in works that included both sexes, women reported higher levels of dissatisfaction with body image; except for two studies^{24,37} in which it was men who reported higher levels of dissatisfaction.

DISCUSSION

Rurality is more than just municipalities with less than 5,000 inhabitants; it is also related to a way of perceiving, behaving and building a reality.³⁸ Characteristics such as tradition, conservatism, family as a fundamental value, have been considered, mainly, as typical of a rural context,³⁹ in contrast to aspects such as competitiveness, sexual liberation, success, consumerism, traditionally attributed to more urbanized contexts.⁴⁰ However, in recent years there has been a homogenization of contexts, where rural regions have adopted ways of thinking and lifestyles of urban populations due to, among other things, the influence of the media and globalization.³⁸

As part of these phenomena, which used to occur regularly in urban areas and can now be visualized in rural areas, body dissatisfaction stands out. Based on the studies reviewed, it is possible to point out the existence of such dissatisfaction also in the rural population, mainly with a tendency to thinness. For example, in the research carried out in rural communities, the majority of women expressed a greater desire for a slim, thin figure, without this coinciding with their current figure. In this regard, the researchers report that "dislike of the body", expressed by the interviewees and related more to an aesthetic motive than to health, is increasing in rural communities, and therefore invites reflection on how medical, family, community and media discourses have influenced their social representations of the body.²⁵

When results are compared, in relation to the level of body image dissatisfaction, with those obtained in populations from urban areas, it can be seen that there is no significant variation and that the tendency to thinness is shared by both contexts, for example, in a study carried out in three Chinese communities, one of them rural, it was found that the participants from the three communities had a desire for a slimmer figure in addition to sharing the concern about the consumption of fats, which is why the researchers mention that those are phenomena more related to modernity than to ethnicity.³⁵

An important aspect to consider is the inclusion of both genders in the study samples, allowing the possibility of finding that body dissatisfaction is a phenomenon shared by men, who may even be presenting a higher level of dissatisfaction than women,^{24,37} a similar situation presented in urbanized areas.^{41,42}

The inclusion of men in the study samples becomes even more important when considering that body dissatisfaction is a risk factor for eating disorders, a growing public health problem: according to data from the Center for Health and Social Care (NHS) in the United Kingdom, between 2005 and 2014 the number of hospital admissions due to eating disorders in men aged 10-24 increased by 20%.²

Thanks to the media, the aesthetic ideal prevailing in urbanized contexts has also permeated the rural population, maintaining the same prototype to be achieved: an ideal figure regularly associated with thinness in women; and in the case of men, a muscular and athletic torso.⁴³ However, some women in rural regions still maintain the perception of a "robust" body as a desirable body because they consider it to be "healthy", yet this vision is mainly present among older women.^{26,28}

In this sense, Guzmán-Saldaña et al.²⁶ mention that in the case of body image it is necessary to analyze the life cycle of people, because the perception of the body varies depending on age and marital status, among other factors. Adolescence, for example, is a stage that is especially sensitive to social rejection and isolation, mainly if young people present certain physical characteristics such as overweight, a situation that can put pressure on them to the point of exaggerating the subjective assessment of their physical appearance.⁴⁴ In the case of the studies reviewed, participants with overweight or obesity scored higher than people with normal weight, yet dissatisfaction was present in both people with obesity and people with normal weight.

The instrument used by most studies to measure the level of body dissatisfaction was the Figure Rating Scale (FRS). This one, although it has had detractors arguing that the figures do not represent the totality of shapes and bodies,²⁰ has proven to be valid and reliable for children, adolescents or adults.⁴⁵

Finally, it should be mentioned that most of the works reviewed highlight the importance of continuing to study the presence of body dissatisfaction in rural populations, mainly due to the increase in the prevalence of eating disorders in this context: in a descriptive study, the prevalence of eating disorders was measured in a sample of 469 adolescents in school in two time periods (2008 and 2012): for the first period the prevalence was 6% and for the second period it was 9.5%. Although the trend remained stable, what the authors called a "ruralization of the disorder" attracted attention, due to the high prevalence found in this context.⁴⁶

CONCLUSIONS

The study of body image dissatisfaction has focused mainly on the urban population, but the works reviewed here show that both men and women of different ages and from rural context also manifest a desire to conform to the prevailing social aesthetic ideals, with all the health risks that this implies. Although more research is needed on this type of population, considering also the criterion of rurality which, due to the cultural transition, may be changing at present. It is important to consider the contributions of the works presented here pointing out the need to implement intervention strategies aimed equally at rural populations.

REFERENCES

1. Vázquez Arévalo R, López Aguilar X, Ocampo Téllez-Girón MT, Mancilla-Díaz JM. Eating disorders diagnostic: from de DSM-IV to DSM-V. *Rev. Mex. Trastor. Aliment.* 2015;6(1):108-20.
2. Thompson D. Boys and men get eating disorders too. *Trends Urol. Men's Health.* 2017;8(2):9-12.
3. Amaya Hernández A, Álvarez Rayón GL, Mancilla Díaz JM. Insatisfacción corporal en interacción con autoestima, influencia de pares y dieta restrictiva: una revisión. *Rev. Mex. Trastor. Aliment.* 2010;1(1):76-89.
4. Devlin MJ, Zhu AJ. Body image in the Balance. *JAMA.* 2001;286(17):2159.
5. Unikel Santoncini C, Díaz de León Vázquez C, Rivera Márquez JA. Definiciones, etiología y modelos conceptuales. In: Ruiz-Chapoy ZP, editor. *Conductas alimentarias de riesgo y factores de riesgo asociados:*

- desarrollo y validación de instrumentos de medición. Ciudad de México: Universidad Autónoma Metropolitana; 2017:19-43.
6. Díaz Gutiérrez MC, Sánchez Espinoza IJ, Bilbao y Morcelle GM, Para Carriedo A. Evaluación del estado de nutrición, glucosa capilar, presión arterial e insatisfacción corporal en una población de artesanos indígenas mexicanos que acuden a una feria universitaria anual de artesanías. *An. Antropol.* 2019;53(1):101-7.
 7. Morandé Lavín G. Aspectos socioeconómicos y trastornos alimentarios. De la desnutrición a la opulencia. *Trastor. Conducta Aliment.* 2005; 1:30-8.
 8. Varela Macedo VM. Análisis de la relación existente entre aculturación y nacionalidad. *Psicol. Am. Lat.* 2005; 3:1-16.
 9. Ávila Sánchez MJ, Jáuregui Díaz JA. Dietary risk behaviors among adolescents and young people of Nuevo Leon. *Rev. Mex. Trastor. Aliment.* 2015; 6:1-12.
 10. Ramaiah RR. Eating disorders among medical students of a rural teaching hospital: a cross-sectional study. *Int. J. Community Med. Public Health.* 2015;2(1):25-8.
 11. Clifford E. Body satisfaction in adolescence. *Percept. Mot. Ski.* 1971; 33:119-25.
 12. Levine MP, Smolak L, Moodey AF, Shuman MD, Hessen LD. Normative Developmental Challenges and Dieting and Eating Disturbances in Middle School Girls. *Int. J. Eating Disorders.* 1994;15(1):11-20.
 13. Savage MP, Scott LB. Physical Activity and Rural Middle School Adolescents. *J. Youth and Adolescence.* 1998;27(2):245-53.
 14. Guiney KM, Furlong NE. Correlates of Body Satisfaction and Self-Concept in Third and Sixth-Graders. *Curr. Psychol.* 1999;18(4):353-67.
 15. Baturka N, Hornsby PP, Schorling JB. Clinical Implications of Body Image Among Rural African-American Women. *J. Gen. Intern. Med.* 2000;15(4):235-41.
 16. Jones LR, Fries E, Danish SJ. Gender and Ethnic Differences in Body Image and Opposite Sex Figure Preferences of Rural Adolescents. *Body Image.* 2007;4(1):103-8.
 17. Pérez Gil-Romo SL, Vega-García LA, Romero-Juárez G. Prácticas alimentarias de mujeres rurales: ¿una nueva percepción del cuerpo? *Salud Publica Mex.* 2007; 49:52-62.
 18. Pérez Gil Romo SE, Romero Juárez G. Imagen corporal de mujeres rurales de la Sierra Juárez y costa de Oaxaca: una aproximación nutrio-antropológica. *Estud. Soc.* 2008;16(32):79-11.
 19. Pérez-Gil SE, Romero G. Imagen corporal en mujeres de tres zonas rurales de México: percepción y deseo. *Salud Publica Mex.* 2010;52(2):111-18.
 20. Pérez-Gil SE, Paz C, Romero G. Cuerpo, imagen y saberes alimentarios en infantes oaxaqueños, México: un primer acercamiento. *Rev. Latinoam. Cienc. Soc. Niñez Juv.* 2011;2(9):847-68.
 21. Guadarrama Guadarrama R, Carrillo Arellano SS, Márquez Mendoza O, Hernández Navor JC, Veytia López M. Insatisfacción corporal e ideación suicida en adolescentes estudiantes del Estado de México. *Rev. Mex. Trastor. Aliment.* 2014; 5:98-106.
 22. Pérez IO, Estrella D. Percepción de la imagen corporal y prácticas alimentarias entre indígenas Mayas de Yucatán, México. *Rev. Chil. Nutr.* 2014;41(4):383-90.
 23. Pérez Izquierdo O, Pérez-Gil Romo SE, Chimas Dzul AE. Índice de masa corporal y percepción de mujeres mayas obesas de Quintana Roo, México. *Poblac. Salud Mesoam.* 2016; 14:1-22.
 24. Romero Juárez AG, Pérez Gil Romo SA, De la Rosa Cruz SA. Cuerpo y percepción en una zona rural de México: ¿una preocupación sólo de mujeres o también de hombres? *Demetra.* 2017;12(1):21-40.
 25. Pérez Gil SE, Romero JG. Imagen corporal y representaciones alimentarias en mujeres de trece comunidades rurales mexicanas. *Poblac. Salud Mesoam.* 2018;15(2):1-28.
 26. Guzmán-Saldaña R, Saucedo-Molina TJ, García Meraz M, Galván García M, Del Castillo Arreola A. Body image and body mass index of indigenous women from Hidalgo state, Mexico. *Rev. Mex. Trastor. Aliment.* 2017; 8:56-62.
 27. Walker ARP, Walker BF, Locke MM, Cassim FA, Molefe O. Body Image and Eating Behavior in Interethnic Adolescent Girls. *J. Roy. Soc. Health.* 1991;111(1):12-6.
 28. Szabo CP, Allwood CW. Body figure preference in South African adolescent females: a cross cultural study. *Afr. Health Sci.* 2006;6(4):201-6.
 29. Pedro TM, Micklesfield LK, Kahn K, Tollman SM, Pettifor JM, Norris SA. Body Image Satisfaction, Eating Attitudes and Perceptions of Female Body Silhouettes in Rural South African Adolescents. *PLoS ONE.* 2016;11(5):e0154784.
 30. Pioreschi A, Wrottesley SV, Cohen E, Reddy A, Said-Mohamed R, Twine R, et al. Examining the relationships between body image, eating attitudes, BMI, and physical activity in rural and urban South African young adult females using structural equation modeling. *PLoS ONE.* 2017;12(11):e0187508.
 31. Terhoeven V, Nikendei C, Bärnighausen T, Bountogo M, Friederich HC, Ouermi L, et al. Eating disorders, body image and media exposure among adolescent girls in rural Burkina Faso. *Trop. Med. Int. Health.* 2020;25(1):132-41.
 32. Kenardy J, Ball K. Disordered eating, weight dissatisfaction and dieting in relation to unwanted childhood sexual experiences in a community sample. *J. Psychosom. Res.* 1998;44(3-4):327-37.
 33. Jonat LM, Birmingham CL. Disordered eating attitudes and behaviors in the high-school students of a rural Canadian community. *Eat. Weight Disord.* 2004;9:285-9.
 34. Valenciano Pacheco MC, Solano Pinto N. La insatisfacción corporal en mujeres adultas: un estudio piloto. *TOG (A Coruña).* 2012;9(19):1-23.
 35. Lee S, Lee AM. Disordered eating in three communities of China: a comparative study of female high school students in Hong Kong, Shenzhen, and rural Hunan. *Int. J. Eat. Disord.* 2000;27(3):317-27.
 36. Rosas Muñoz M, Delgado Floody P, Cea Leiva F, Alarcón Hormazábal M, Alvarez San Martín R, Quezada Gallego K. Comparación de los riesgos en el trastorno de la conducta alimentaria y en la imagen corporal entre estudiantes mapuches y no mapuches. *Nutr. Hosp.* 2015;32(6):2926-31.
 37. Adithyan GS, Shroff H, Sivakami M, Jacob J. Body Image Dissatisfaction in Adolescents from Rural Tamil Nadu, India. *IJSW.* 2018;79(3):309-26.
 38. Sanz MA. Conceptos, contextos y voces. In: Prensas Universitarias de Zaragoza, editor. *El consumo de la cultura rural.* Zaragoza: Prensas Universitarias de Zaragoza; 2007;15-28.
 39. Pérez E. Hacia una nueva visión de lo rural. In: Giarraca N, editor. *¿Una nueva ruralidad en América Latina?* Buenos Aires: Libronauta Argentina S.A.; 2005:17-30.
 40. Acosta García MV, Gómez Peresmitré G. Insatisfacción corporal y seguimiento de dieta. Una comparación transcultural entre adolescentes de España y México. *Int. J. Clin. Health Psychol.* 2003;3(1):9-21.
 41. Behar AR, Vargas FC, Cabrera VE. Insatisfacción corporal en los trastornos de la conducta alimentaria: un estudio comparativo. *Rev. Chil. Neuro-Psiquiat.* 2011;49(1):26-36.
 42. Dakanalis A, Pla-Sanjuanelo J, Caslini M, Volpato C, Riva G, Clerici M, et al. Predicting onset and maintenance of men's eating disorders. *Int. J. Clin. Health Psychol.* 2016;16(3):247-55.
 43. Raich RM. Una perspectiva desde la psicología de la salud de la imagen corporal. *Av. Psicol. Lat.* 2004; 22:15-27.

44. Trejo Ortiz PM, Castro Veloz D, Facio Solís A, Mollinedo Montano FE, Valdez Esparza G. Insatisfacción con la imagen corporal asociada al Índice de Masa Corporal en adolescentes. *Rev. Cubana Enfermer.* 2010;26(3):144-54.
45. López Sánchez GP, Díaz Suárez A, Smith L. Análisis de imagen corporal y obesidad mediante las siluetas de Stunkard en niños y adolescentes españoles de 3 a 18 años. *An. Psicol.* 2018;34(1):167-72.
46. Ortiz Cuquejo LM, Aguiar C, Samudio Domínguez GC, Troche Hermosilla A. Trastornos de la conducta alimentaria en adolescentes: ¿una patología en auge? *Pediatr. (Asunción).* 2017;44(1):37-42.