



A Comparative Study of Verbal and Visual Self-Representations: Body Image and Health Aspirations of Brazilian and French Women

Ariane Franco Lopes Da Silva^{1,2} · Golda Cohen³ 

Accepted: 18 February 2025
© The Author(s) 2025

Abstract

This study aims to comparatively analyse how young adult women from Brazil and France perceive their bodies and health, through both verbal and visual self-representations. The theory of social representations offers the theoretical framework for this study. A total of 164 women aged 18 to 20 (82 from Brazil and 82 from France) participated in the research. They responded to a questionnaire with word association technique, open-ended sentences and drawing tasks. The data were analysed by the content analysis and visual analysis techniques. The results reveal both common and diverse perspectives and expectations concerning body image, aging, and health. They also show varying perceptions of which body parts require monitoring and control while highlighting contrasts in body satisfaction and dissatisfaction. These results were interpreted through the lens of culture and life experiences. This investigation contributes to a better understanding of both uniformity and diversity in body representations and aids the design of community educational and mental health projects in culturally diverse societies.

Keywords Human body · Drawings · Health · Women · Social representations · Culture

✉ Ariane Franco Lopes Da Silva
alsilva@ucp.pt; ariane.silva@ultreia.org

Golda Cohen
golda.cohen@univ-angers.fr

¹ Faculty of Education and Psychology, Research Centre for Human Development (CEDH), Universidade Católica Portuguesa, Rua Diogo Botelho, 1327, 4050-039 Porto, Portugal

² Ulteia Association, Rua do Campo Alegre, N1517 LJ24 C82, 4150-182 Porto, Portugal

³ LPPL, University of Angers, 11 Boulevard de Lavoisier – 49045, CEDEX 01, Angers, France

Introduction

Studies from diverse fields of knowledge and distinct theoretical traditions have emphasized the importance of considering the body, its perception, representation and appearance for understanding social developments. The body is a privileged object in the study of identities because it is a forum where individuals' life experiences meet the social world, a means for projecting personal traits and a channel for the expression of social status and group membership (Goffman, 1990; Jodelet, 2006; MacLachlan et al., 2012; Silva, et al., 2020). Individuals express social identities by adopting the characteristics and associated representations prevalent within a social group (Duveen, 2001). Thus, through body monitoring and presentation, individuals express group membership, cultural values, and personal beliefs about many aspects of their lives (Silva et al., 2020; Silva et al., 2024).

However, research has also shown that preoccupation with body appearance and the struggle to conform to aesthetic standards are associated with health concepts and can influence health practices (Andrieu, 2009; Gaspar et al., 2022; Herzlich, 1973; Levesque & Li, 2014; Rodgers et al., 2023). Engaging in physical exercise to achieve and maintain a slender physique illustrates the nuanced connection between appearance and health habits (Del Priore, 2011; Fernandes, 2009; Herzlich & Adam, 1994). Furthermore, perceptions and representations of the body have been shaped by the increased interaction with image-oriented social media, with content that aims to promote health (Hogue & Mill, 2019; Prichard et al., 2020; Raggatt et al., 2018; Rounsefell et al., 2019; Tiggemann & Zaccardo, 2015). Social media disseminates body images and health concepts to a wider audience, making people aware of variations in appearance, promoting new body ideals and creating uniformity in how the body is represented (Falvey, 2012; Schaefer et al., 2019). Since ideas and beliefs about the body are disseminated by the media, they can shape the way people represent themselves and interact with each other.

About the Study

While many studies have highlighted the societal pressures on young adult women to conform to beauty standards and their effect on mental health (Gaspar et al., 2022; Kostro, 2010; Pruis & Janowsky, 2010; Stenzel et al., 2006; Tiggemann & McCourt, 2013; Tiggemann & Slevac, 2012), more research is needed to understand young women's preoccupation and desires regarding body appearance and health as they age. Thus, our study aims to observe what young adult women think about their bodies and health through self-representations in the present and future. By analysing actual and anticipative body images, this study intends to investigate expectations and projections concerning body image and health, widening the understanding of women's body representations. The study also examines self-representations related to body satisfaction and dissatisfaction, highlighting which body parts are perceived to need more monitoring and control. Additionally, the study presents a comparative analysis of the data obtained with two groups of women from Brazil and France. The study poses the following questions: (1) How do women from different countries

represent their bodies and health? (2) How do they anticipate body changes across the life course? (3) Which body parts and body regions are thought to require more monitoring and control? The comparative analysis aims to identify which body traits and health concepts are common and valued across diverse socio-cultural groups, suggesting their roots in cultures and traditions, and which are rooted in individual's life experiences. The comparative approach intends to contribute to a better understanding of both uniformity and diversity in body representations and aid the design of community educational and mental health projects in culturally diverse societies.

The theory of social representations idealized by Moscovici (1961) offers the theoretical framework for this study because it emphasizes the role that common-sense knowledge, culture, subjectivity and life experiences play in behaviour. For the structural approach to this theory (Abric, 1994), social representations are composed of central and peripheral elements. The central ones are conventional, and descriptive, while the peripherals are contextual and flexible, allowing changes and adaptations to peoples' realities. These elements are present in speeches, and some methodological instruments motivate their expressions, such as questionnaires and word association techniques. Studies with a psychosocial perspective also adopt various image interpretation and production techniques as means of expression of social representations about varied themes and their iconic dimensions (Cohen & Moliner, 2017; Galli et al., 2017; Silva et al., 2021; Silva et al., 2024).

Methods

The participants responded to a questionnaire with word associations, open-ended questions and drawing technique. This mixed-method approach explores verbal and visual modalities of self-representations. It intends to facilitate the observation of a wider variety of beliefs about the topics under investigation (Bauer, 2015) and motivate the expression of abstract and physical qualities associated to the body and health.

Participants

A total of 164 women, aged between 18 and 20, participated in this study. Group 1 (G1) consists of 82 women from Brazil and group 2 (G2) consists of 82 women from France. An independent-sample *t* test was conducted to compare the mean age, and there was no significant difference between the Brazilian and the French participants (Brazil— $M=18.68$, $SD=0.61$; French— $M=18.51$, $SD=0.85$; $t(162)=1.481$; $p=0.14$). Cohen's size value ($d=0.23$) suggests a small effect.

The Brazilian participants are originally from the southern region of the country, and the French are from the western region of France. This is a sample of convenience selected by approaching the participants at universities. All participants are undergraduates, enrolled in their first year of university courses and are single. According to information provided on income, they have a middle-class background, which corresponds to the average living standards of their regions. The application

of the research instrument in undergraduates would guarantee a good number of respondents within this age group and with similar levels of education. Despite the similarities regarding the age and social-economic background of participants in this study, they differ regarding their cultural backgrounds. This distinctiveness may be reflected in women's body representations, shaped largely by their own cultural values.

The research objective was explained and accompanied by an invitation to participate. Additionally, we informed the participants about their right to withdraw at any time and guaranteed that the data obtained would be treated anonymously. After agreeing to participate through informed written consents, they were given a printed questionnaire, which had to be self-completed under the supervision of researchers. The research instrument respects the ethical principles and procedures of our universities, and they have been approved by the Ethical Committee (reference number: 81848218.3.0000.5564).

Materials and Procedures

The questionnaire is divided into three main sections. In the first section, the participants were asked to write the first five words that came to mind after the following prompts: 'body in the present' and 'body in the future'. With the first prompt (body in the present), we explored how women perceive their current bodies, and with the second (body in the future), how they anticipate their bodies in older ages and the transformations at different stages of life. The data were analysed by the software Evoc (2000) based on the method designed by Vergès (1992). Two tables were produced showing the combination of the frequency of evoked words with the mean rank of evocations for each inductive term. Based on the studies by Abric (1994), the intention is to observe the most common and conventional ideas about the topic, a salience that could define its social representations. Additionally, a comparative analysis examined the similarities and differences in these representations between the groups.

In the second section of the study, the participants were asked to complete three open-ended sentences: (a) '*When I think about health, the most important thing is...*'; (b) '*If I could change any part of my body, I would change...*'; (c) '*If I could keep any part of my body the same throughout my life, I would keep...*' This technique works as a direct inducer of themes (Rey, 2005), motivating expressions of ideas and beliefs about the subject under investigation. We explored conceptions of health and examined feelings of dissatisfaction and satisfaction concerning specific body parts. The data were analysed by the content analysis (Bardin, 1977). First, we carried out a floating analysis of the comments and made an inventory of the most significant ideas regarding health, body satisfaction and dissatisfaction. After this initial reading, we classified these comments according to their content and meanings and observed their frequencies. A comparative analysis explored both the similarities and differences in these representations across the group.

In the third section of the study, the participants were asked to produce two drawings: '*The body I have*' and '*The body I would like to have*'. The idea is to observe

the differences between the images of the actual body and the desired body and observe if the results differ from one group to the other. We analysed the drawings based on the studies by Silva et al. (2020), Cohen and Moliner (2017, 2021) and Silva et al. (2021). Initially, we carried out a floating analysis of the drawings and made an inventory of their main elements. These elements were classified into categories and subcategories. Then, we carried out a comparative analysis of the two drawings of each participant to see whether there were changes in the second drawing when compared with the first one. Changes in the second drawing may indicate negative body image dispositions and body dissatisfaction. We explored which body parts were more visible and valued and which ones conveyed image concerns. Finally, a comparative analysis investigated the commonalities and distinctions in these representations between the groups.

Results

Body in the Present and Future

Table 1 shows the results of the free association task for the term body in the present, for the two groups of participants (Brazilian group—G1 and French group—G2). The mean rank of appearance of words was selected to be 2.5. The words with a frequency level equal to or higher than 14 were considered the most frequent. They correspond to around 20% of the subjects from each sample.

The results show the differences and similarities between both groups. Health is the predominant theme linked with the term body in the present among both groups

Table 1 Free association: ‘body in the present’—Software Evoc, frequencies and mean rank of appearance (G1 and G2)

		<i>f</i>	First rank <2.5		<i>f</i>	Last rank ≥2.5
G1 ≥15 <10	Central words			First periphery		
	Healthy	28	2.464	Beauty	28	2.964
	Slim	15	2.467			
	Transition group			Second periphery		
	Tall	8	2.000	Tired	10	2.700
				Happy	8	3.000
				Fat	8	2.875
G2 ≥14 <12	Central words			First periphery		
	Healthy	16	2.438	Fit	17	3.000
				Beauty	14	2.571
	Transition group			Second periphery		
	Complex	8	2.125	Young	12	3.000
				Sport	12	3.083
				Skin	8	3.125

of participants (G1 and G2), and it is conveyed more frequently and promptly (Central words). However, it occurred more often in G1 than in G2. The word ‘beauty’ in the first periphery of G1 also appears as a relevant component of this representation, followed by weight (‘slim’). In G2, ‘fit’ and ‘beauty’ complement the idea of being healthy (Central words). The word ‘complex’ (Transition group) may indicate that this representation consists of many interrelated elements. The second periphery in G1 describes the different feelings and moods expressed by the body (‘tired’; ‘happy’) and may be making references to everyday life. To be overweight (‘fat’) adds a physical description to this representation and complements the central word slim. The second periphery of G2, containing the words ‘young’ and ‘sport’, reinforces the concept of fitness (First periphery) and includes ‘skin’ potentially linked to youth.

Table 2 shows the results for the term body in the future, for the two groups of participants (G1 and G2). The mean rank of appearance of words was selected to be 2.5. The words with a frequency level equal to or higher than 20 were considered the most frequent.

For G1, beauty (Central words) and ‘healthy’ (First periphery) seem to convey a positive view of the body in the future. The words strong, slim, ‘exercise’ and happy in the peripheries may express a hopeful view about an older body (body in the future) and an association between beauty, health and well-being. For G2, on the other hand, the central word ‘ageing’, together with ‘wrinkles’ (First periphery), conveys concerns about the decline or deterioration of the body over time. The term ‘fatigue’, in the second periphery, expresses a physical or mental response to the declining condition of the body. Conversely, ‘change’ and ‘evolution’, which communicate body transformations, may express a more positive description of the

Table 2 Free association: ‘body in the future’—Software Evoc, frequencies and mean rank of appearance (G1 and G2)

		<i>f</i>	First rank < 2.5		<i>f</i>	Last rank ≥ 2.5
G1 ≥ 20 < 14	Central words			First periphery		
	Beauty	20	2.300	Healthy	38	2.500
	Transition group			Second periphery		
	Strong	12	2.417	Happy	14	3.286
	Slim	10	1.800			
	Exercises	8	2.250			
G2 ≥ 24 < 14	Central words			First periphery		
	Ageing	32	2.438	Wrinkles	24	3.458
	Transition group			Second periphery		
	Change	8	1.500	Fatigue	14	2.714
	Evolution	8	2.444	Sport	13	2.769
				Beauty	12	2.583
			Muscles	12	3.333	
			Healthy	10	2.700	

ageing body (Transition group). Moreover, happy in G1 and evolution in G2 convey mental states and progress rather than physical aspects of the body.

Health Concept

In the second part of the study, the participants completed the following sentence: ‘*When I think about health, the most important thing is...*’. Their comments were analysed using the content analysis (Bardin, 1977). Some participants associated health with more than one factor. Thus, the total of classified items was higher than the number of participants. Additionally, similar items mentioned by the same participant were scored only once. We identified five themes: (a) ‘Mental and physical health’, (b) ‘Diet and hydration’, (c) ‘Active lifestyle’, (d) ‘General well-being’, (e) ‘Care and responsibility’ (see Table 3 for content analysis). The category Mental and physical health assembles opinions about the association between mind and body and the importance of frequent medical check-ups: ‘to keep stress away, go for check-ups’ (G1); ‘keep my physical and mental skills’ (G2). The category diet and hydration comprises ideas about the importance of good eating and drinking habits: ‘to have a good diet’ (G1), ‘eat well’ (G2). The category active lifestyle groups comments about the need to be fit and active: ‘to practice physical exercises’ (G1), ‘do more physical exercises’ (G2). The category well-being/social life gathers points of view about general well-being: ‘feeling good about yourself’ (G1), ‘feeling happy and well’ (G2). The category care and responsibility contains ideas about being responsible for one’s own health: ‘take care of yourself’ (G1), ‘look after yourself’ (G2).

The results show that the concept of health includes various elements, which were the same in both groups but differed significantly in their distribution ($n=265$; $\chi^2(2)=12.40$, $df=4$; $p=0.0145$, $p<0.05$). We see in G2 an emphasis on the correlations between mental and physical health and lower scores for diet/hydration, active lifestyle, social life and self-care. The results of G1 are more distributed, indicating that mental and physical health are interconnected, and that diet, active lifestyle and social life are equally important for health. Finally, the theme of being responsible for one’s own health was mentioned by few subjects in both groups.

We carried out the content analysis of the open-ended sentence ‘*If I could change any part of my body, I would change...*’ and identified four body areas and themes: (a) ‘lower body’, (b) ‘middle body’, (c) ‘upper body’ and (d) ‘weight and height’. The

Table 3 Content analysis of completion of open-ended sentence: ‘When I think about health the most important thing is...’ categories, n and % (G1 and G2)

Category	Group 1, n (%)	Group 2, n (%)
Mental/physical health	39 (27.03%)	55 (45.45%)
Diet/hydration	34 (32.61%)	17 (14.04%)
Active lifestyle	41 (28.47%)	22 (18.18%)
Wellbeing/social life	14 (28.47%)	12 (9.09%)
Care/responsibility	16 (11.11%)	15 (12.39%)
Total number of items	144	121

category lower body assembles negative references to the size or shape of the hips, legs or feet and the aspiration to change them if possible: ‘[...] my hips, because they are too narrow’ (G1), ‘I would change my legs’ (G2). The category ‘middle body’ includes comments about the desire to change the breasts, waist and arms: ‘I would reduce my waist to improve the shape of my body’ (G1), ‘[...] my belly because of the fat pad and my breast because it is too small’ (G2). The category ‘upper body’ refers to the desire to change the neck, face, eyes, nose, mouth or hairstyle: ‘[...] my nose and forehead, [...] my nose is strange, and my forehead is large’ (G1), ‘I would change my nose because I don’t feel comfortable’ (G2). The category weight/height comprises negative comments about the weight and height and the wish to change them: ‘[...] be slimmer in some areas. I find more beautiful [...] I don’t feel well sometimes’ (G1), ‘I need to lose weight.’ (G2).

Most participants from both groups manifested the desire to change something in their bodies (G1, 85.4%; G2, 89%). The participants who did not wish to change body parts said they were happy with their look. The analysis of the open-ended sentence ‘*If I could keep any part of my body unchanged throughout my life, I would keep...*’ shows that most participants from both groups wish to keep certain body features unchanged across the life course (G1—95.12%; G2—89%). We classified their responses into the same categories as in the previous open-ended sentence. Table 4 shows the content analysis for both open-ended sentences.

The chi-square results show that there is a significant difference between the scores for body changes ($n = 181$; $\chi^2(2) = 19.81$, $p < 0.001$), and no significant difference for keeping body the same ($n = 180$; $\chi^2(1) = 1.6943$, $p = 0.42$). G2 expressed a greater inclination towards altering middle body regions, including the abdomen and chest. Participants in group 1 expressed, almost equally, the wish to change middle and upper body parts and weight and height. They also expressed preferences for lighter body frames as opposed to G2. When commenting about what to keep unchanged, participants in both groups scored higher in the category upper body. They specifically mentioned the desire to keep their faces, eyes and hair unchanged because they reflect their identities: ‘my eyes, my hair, because they are part of my

Table 4 Content analysis—open-ended sentences: ‘If I could change any part of my body, I would change...’; ‘If I could keep any part of my body unchanged, I would keep...’, categories, n and % (G1 and G2)

Category	Group 1, n (%)	Group 2, n (%)
I would change		
Lower body	9 (10.84%)	27 (27.55%)
Middle body	24 (28.91%)	41 (41.83%)
Upper body	24 (28.91%)	20 (20.40%)
Weight/height	26 (31.32%)	10 (10.20%)
Totals	83	98
I would keep		
Lower body	11 (14.47%)	18 (17.30%)
Middle body	12 (15.78%)	23 (22.11%)
Upper body	53 (69.73%)	63 (60.57%)
Totals	76	104

identity' (G1), 'My eyes reflect who I am, it is a 'door' to access my 'self'' (G2). Upper body parts, such as hair and eyes, had a symbolic value and were less linked to body properties.

Drawing my Body

We asked participants to produce two drawings side by side following the themes: '*The body I have*' for the first drawing and '*The body I would like to have*' for the second drawing. In the first round of analysis, each subjects' pair of drawings was compared with the aim to observe if they contain or not alterations. Subsequently, they were classified as (1) Contain changes (if the second drawing was considerably different from the first) or (2) No changes (if the second drawing was identical or very similar to the first). In the second round of analyses, we examined the second drawing to identify differences in body features. The most common changes were weight, shape, height and hair.

We focused on the depictions of the stomach, hips and thighs to classify the drawings into the category weight. Larger and rounder figures were classified as 'heavy' and slimmer figures as 'light'. Body weight expresses aspects of body image which can influence how it is experienced and represented (Austin et al., 2009). Thus, if the second drawing depicted a thinner and lighter figure, that would indicate a preference for being slimmer. The category 'shape' refers to body silhouette and has two sub-categories: 'straight' and 'curvy'. We looked at the configuration of the waist and chest regions to classify the drawings into these sub-categories. If the second drawing had a curvier figure than the first, that would indicate a preference regarding this specific body contour.

The category 'height' refers to body stature and was determined by comparing the two drawings regarding their height and has two sub-categories: 'short' and 'tall'. The characteristics of the second drawing would indicate a preference for a particular body height. The category 'hair' has two sub-categories: 'styled' and 'non-styled'. It refers to depictions of haircuts, hairstyles and hair length. We considered styled hair the one depicted longer, untied or with curly ends. Differences between the drawings in this aspect can also indicate a preference for a particular hairstyle. Then, the results of the two groups were compared to see possible differences between them. Figure 1 presents examples of how we analysed the pair of drawings of the same subjects.

Most subjects introduced at least one alteration to their second drawings (G1 = 85.36% and G2 = 70.54%), indicating a prevailing preoccupation with body shape and the desire to modify a body feature in both groups. The number of items altered in each drawing was also observed. G1 made various modifications to the same drawing (number of items = 112), while G2 introduced only one alteration (number of items = 67).

The types of alterations were not significantly different between the groups. The results indicate that subjects seemed to be preoccupied with their weight, because of the frequency of drawings classified in the sub-category 'heavy to light' (G1, $n=44$ —62.85%; G2, $n=28$ —41.79%). Drawings d and h (see Fig. 1) illustrate the preference for lighter and slimmer figures. The results also show a concern with body

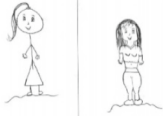







	
a. Shape: straight to curvy; Weight: light to heavy; Hair: non-styled to styled (G1)	b. Weight: heavy to light; Hair: non-styled to styled (rounder ends) (G1)
	
c. Shape: straight to curvy (G1)	d. Shape: straight to curvy; Weight: heavy to light (G1)
	
e. Shape: straight to curvy; Height: short to tall; Hair: non-styled to styled (curly ends) (G2)	f. Weight: heavy to light (G2)
	
g. Shape: straight to curvy (G2)	h. Weight/height: heavy to light, and short to tall (G2)

Fig. 1 Examples of drawings analysis—the same—‘The body I have’ next to ‘The body I would like to have’—G1 and G2

shape and the desire to have a rounder and curvier figure because of the relatively high frequency of drawings classified in the sub-category ‘straight to curvy’ in both groups (G1, $n = 39 - 55.71\%$; G2, $n = 25 - 37.31\%$). Drawings a, c, d and g illustrate this preference (see Fig. 1). When changes to the hair were made, the participants drew curly and/or tied hair (G1, $n = 16 - 22.85\%$; G2, $n = 9 - 13.43\%$). Finally, when making alterations to height, participants chose to draw taller figures (G1, $n = 13 - 18.57\%$; G2, $n = 5 - 7.46\%$). Thus, participants from both groups produced similar representations of their preferred bodies such as slimmer, curvier and taller.

Discussion

This study observed what young women from different countries think about their bodies and health through self-representations in the present and in the future. We analysed which representations were common to both groups of women and which were unique to each group. It was also possible to identify a variety of responses within groups, possibly rooted in individuals’ life experiences. The free association task provoked

spontaneous expressions of ideas about the body. The young body (body in the present) was frequently associated with health by participants from both groups, which corresponds with research by Levesque and Li (2014) on the association between body image and health and Rodgers et al. (2023) on the similarity in how the body is perceived across diverse socio-cultural groups. It is possible that this consensus results from exposure to ideas about body image and its association with mental and physical health disseminated across the globe, as Rodgers et al. (2023) have indicated. However, further studies are needed to observe the nuanced relationship between media exposure and representations of the body and health in different countries.

Additionally, the groups presented different elements that form the peripheries of their representations of the young body, possibly shaped by socio-cultural background and unique life experiences. G1 integrated elements such as weight and beauty, which is consistent with research on body representations showing associations between health, thinness and beauty (Fernandes, 2009; Gaspar et al., 2022; Tiggemann & Slevec, 2012). G2 incorporated references to fitness and concerns about skin signs of ageing. This finding aligns with studies on how the French cosmetic industry advertise their products, promoting the belief, even among young women, that skin aging is a process requiring vigilance and could be delayed by their products (Kostro, 2010). The multiple representations of the young body may indicate the different expectations about what people can accomplish as they age.

However, when we asked participants to imagine their bodies in the future, the representations were different. Participants in G1 expressed positive anticipative images of their bodies in older age (beauty, healthy, strong and happy). Possibly, these images find anchorage in the concept of 'positive ageing', which challenges the negative representations of growing older (Featherstone & Hepworth, 2005; Grenier, 2012). It is also possible that they were making anticipatory representations of the body sooner in the future, explaining the similarity in descriptions between the present and the future body in this group. Participants in G2, on the other hand, seemed more concerned with some negative aspects of the body in the future, such as developing wrinkles and having less energy. The results of G2 are consistent with the observations of Kostro (2010) on the negative signs of aging propagated by the beauty industry and the appearance of the face as signifier of age. This iconographic beauty representation creates a distorted image of aging based on fear and insecurity. Moreover, while not as readily and frequently expressed as in G1, certain participants in G2 displayed optimistic views, associating aging with advancement (evolution, beauty) and maintaining physical fitness (sport, muscle), ideas that may stem from the positive aging concept.

According to Moscovici (1961), social representations point to future attitudes and behaviour. Because of the way body image and appearance have been differently linked to health, lifestyle and well-being, understanding how these representations are structured can contribute to a better understanding of young women's future actions regarding health. In this sense, the co-existence of varied elements within the same representation and differences between the groups indicate the possibility of multiple attitudes and actions regarding the body and health, which can aid health professional to identify potential risk factors for women's mental health.

The results of the first open-ended sentence, which worked as a direct inducer of the topic of health prevention strategies, reveal similarities and differences between

the groups. G1 evoked, as equally important, keeping both mental and physical health, attending to regular health check-ups, maintaining a healthy diet, keeping hydrated and engaging in physical activity. On the other hand, G2 scored higher in the category mental and physical health, accentuating the importance of the correlation between these two. Possibly, the most frequent themes convey the prevailing ideas linked to health prevention strategies. We can infer that these representations may influence attitudes and actions aimed at preventing health problems and motivating early intervention and treatment. Engaging in social activities was mentioned as one of these strategies.

The results also point out that few subjects in both groups think that individuals are responsible for their own health, because of the low frequency with which these comments appeared. G1 scored higher on self-care, possibly because they emphasized individual's actions such as having a healthy diet and maintaining an active lifestyle for good health.

Despite the groups differing significantly in the body features they wished to change or improve, the high frequency of comments in the second open-ended sentence technique shows that body dissatisfaction is common. The results align with other investigations on body appearance concerns among women (Gaspar et al., 2022; Rodgers et al., 2023; Tiggeman & McCourt, 2013).

Finally, when responding to what body parts the participants wished to keep unchanged, most agreed to keep their faces, hair and eyes the same. Eyes and hair have a symbolic character. The eyes were considered the 'windows' to the soul, expressing varied emotions and identities. Additionally, makeup and hair style can introduce small modifications to the appearance of the face and eyes, amplifying qualities, camouflaging perceived flaws and conveying adherence to specific social groups. This may explain the lower interest in making permanent changes to their appearance.

In the drawing task, participants from both groups identified slimmer and curvaceous body traits as beauty standards. This result is consistent with findings by Stenzel et al. (2006) on how young females experience peer pressure related to their bodies and fear of rejection due to weight concerns. Being thin is not just about adhering to beauty standards, but also a requirement for being part of a positively regarded social group. The findings also confirm the study by Gaspar et al. (2022) on the value of slimness in France. Additionally, the dissemination of ideas and beliefs about body and health on digital media platforms could also explain the uniformity in the portrayal of the body observed in the drawing task, particularly concerning weight and shape. The portrayal of certain body types and their association to specific groups on traditional and digital media platforms have been connected to their endorsement and appreciation across diverse socio-cultural groups (Hogue & Mill, 2019; Prichard et al., 2020; Raggatt et al., 2018; Rodgers et al., 2023; Rounsefell et al., 2019; Schaefer et al., 2019; Tiggemann & Zaccardo, 2015).

Limitations and Future Directions

We could not observe how far ahead in the future participants imagined their bodies to be after the prompt body in the future. Different time spans could result in varied representations of the ageing body. Future research is needed to analyze more subtle differences in

body representations in different time spans. Secondly, we could not observe whether the similarities between the groups were due to exposure to the same media content because we did not have this information. It would be interesting to explore how women from different cultures respond to the same media content about the body. This is a sample of convenience selected by approaching the participants at universities. Thus, the generalizability of the data could be a limitation. The findings may not extend to a broader group of women, including graduate students and older adults. Education and age may influence representations which are shaped by socio-cultural context and lived experiences. We suggest future studies compare these findings across educational backgrounds and age groups to identify potential differences in how representations are formed.

Conclusion

This study advances our comprehension of young women's body and health representations through a dual examination of their current self-perceptions and the evolving landscape of future self-representations. The study also considers how people in different countries share and diverge in their values, customs, and behaviour regarding their bodies and health. The perspective of social representations offers the theoretical framework to make sense of the dynamic quality of social representations and the role that culture, context and subjectivity play in their construction.

We observed that young adult women tend to incorporate the habits and norms of body appearance that define the female members of the group, creating a feeling of commonness. We also observed that specific body features were common between the groups and may reflect the ideal female body. We also observed that specific body features were common between the groups and may reflect the ideal female body, suggesting that these representations span across different countries. The similarity of body representations, particularly regarding weight and shape, raises questions about how increased circulation of body images through social media might impact perceptions, representations and attitudes towards the body.

We also observed that some participants reinterpreted conventions based on lived experiences, realities and culture, exemplified by certain unique representations of the female body. The co-existence of different elements within the same representation demonstrates its complexity and highlights the need to consider the intricate relationship between common sense knowledge and life experiences in the study of the body and health.

However, the struggle to adhere to norms of body appearance can be a risk factor for women's health, creating anxiety and distress. Thus, the understanding of this interaction can enlighten health professionals about the dynamic dialogue between individuals and cultures, and how representations are reinterpreted and evolve. This insight can aid in designing educational and mental health prevention projects in culturally diverse societies.

Acknowledgements The authors wish to thank the women who participated in this study.

Author Contribution All authors whose names appear on the submission made substantial contributions to the conception of the work, analysis and interpretation of data.

Funding Open access funding provided by FCTIFCCN (b-on).

Data Availability Data will be made available on reasonable request.

Declarations

Ethics Approval The study was approved by the Human Research Ethics committee of Universidade Federal da Fronteira Sul (Ethics approval number: 81848218.3.0000.5564).

Informed Consent Informed consent was obtained from all individual participants included in the study.

Conflict of Interest The authors declare no competing interests.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Andrieu, B. (2009). Préface. Trop de corps? In J-L. Gaspard, & C. Doucet (Eds.). *Pratique et usages du corp dans notre modernité*. (pp. 7–16). Editions Érès.
- Abric, J.-C. (1994). *Pratiques sociales et représentations*. Presses Universitaires de France.
- Austin, S. B., Haines, J., & Veugelers, P. J. (2009). Body satisfaction and body weight: Gender differences and sociodemographic determinants. *BMC Public Health*, *9*(1), 313. <https://doi.org/10.1186/1471-2458-9-313>
- Bardin, L. (1977). *L'analyse de contenu*. Presses Universitaires de France.
- Bauer, M. W. (2015). On (social) représentations and the iconoclastic impetus. In G. Sammut, E. Andreouli, G. Gaskell, & J. Valsiner (Eds.), *The Cambridge Handbook of Social Representations* (pp. 43–63). Cambridge University Press.
- Cohen, G., & Moliner, P. (2017). La tâche d'association iconographique: Mise en exergue du processus d'objectivation dans la représentation sociale du médicament. *Les Cahiers Internationaux De Psychologie Sociale*, *113*(1), 5–24.
- Cohen, G., & Moliner, P. (2021). Analogic and symbolic dimensions in graphic representations associated with patient information leaflets for medicine. *Visual Studies*, *37*(5), 491–50. <https://doi.org/10.1080/1472586X.2021.1900745>
- Del Priore, M. (2011). *Corpo a corpo com a mulher: Pequena história das transformações do corpo feminino no Brasil*. Editora SENAC.
- Duveen, G. M. (2001). Representations, identities, resistance. In K. Deaux & G. Philogène (Eds.), *Representations of the social: Bridging theoretical traditions* (pp. 257–270). Malden Blackwell Publishing.
- Falvey, H. (2012). Cross-cultural differences. In N. Rumsey & D. Harcourt (Eds.), *The Oxford Handbook of the Psychology of Appearance* (pp. 36–46). Oxford University Press.
- Featherstone, M., & Hepworth, M. (2005) Images of aging. Cultural representations of later life. In M. Johnson (Ed.). *The Cambridge handbook of age and ageing*. (pp. 354–362). Cambridge University Press.
- Fernandes, M. H. (2009). Le corps fetiche: la clinique miroir de la culture. In J-L., Gaspar, & C. Doucet (Eds.). *Pratique et usages du corp dans la modernité*. (pp. 117–127). Éditions Érès.
- Galli, I., Fasanelli, R., & Schember, E. (2017). Iconographical stimuli as a creative approach for social representations. *International E-Journal of Advances in Social Sciences*, *3*(8), 473–478. <https://doi.org/10.18769/ijjasos.336979>

- Gaspar, M. C. M., Sato, P. M., & Scagliusi, F. B. (2022). Under the ‘weight’ of norms: Social representations of overweight and obesity among Brazilian, French and Spanish dietitians and laywomen. *Social Science & Medicine*, 298(114861), 1–10. <https://doi.org/10.1016/j.socscimed.2022.114861>
- Goffman, E. (1990). *The presentation of self in everyday life*. Penguin Books.
- Grenier, A. (2012). *Transitions and the lifecourse*. Challenging the constructions of ‘growing old’. Bristol: The Policy Press.
- Herzlich, C. (1973). *Health and illness: A social psychological analysis*. Academic.
- Herzlich, C., & Adam, P. (1994). *Sociologie de la maladie et de la médecine*. Nathan.
- Hogue, J. V., & Mills, J. S. (2019). The effects of active social media engagement with peers on body image in young women. *Body Image*, 28, 1–5. <https://doi.org/10.1016/j.bodyim.2018.11.002>
- Jodelet, D. (2006). Le corps, la personne et autrui. In S. Moscovici (Ed.), *Psychologie sociale des relations à autrui* (pp. 41–68). Armand Colin, Paris.
- Kostro, M. (2010). “Je n’ai pas l’âge d’avoir des rides...”: Les représentations linguistiques du vieillissement dans les publicités des produits de beauté. *Études Romanes de Brno* 31(1), 131–142. <https://hdl.handle.net/11222.digilib/114909>
- Levesque, A., & Li, H. Z. (2014). The relationship between culture, health conceptions, and health practice. A quantitative–qualitative approach. *Journal of Cross-Cultural Psychology*, 45(4), 628–645. <https://doi.org/10.1177/0022022113519855>
- MacLachlan, M., Mháille, G. N., Gallagher, P., & Desmond, D. (2012). Embodiment and appearance. In N. Rumsey, & Harcourt, D. (Eds.). *The Oxford Handbook of The Psychology of Appearance*. (pp. 23–35). Oxford: Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199580521.013.0004>
- Moscovici, S. (1961). *La psychanalyse: Son image et son public*. Presse Universitaires de France.
- Prichard, I., Kavanagh, E., Mulgrew, K. E., Lim, M. S. C., & Tiggemann, M. (2020). The effect of Instagram #fitspiration images on young women’s mood, body image, and exercise behaviour. *Body Image*, 33, 1–6. <https://doi.org/10.1016/j.bodyim.2020.02.002>
- Pruis, T. A., & Janowsky, J. S. (2010). Assessment of body image in younger and older women. *The Journal of General Psychology*, 137(3), 225–238. <https://doi.org/10.1080/00221309.2010.484446>
- Raggatt, M., Wright, C. J. C., Carrotte, E., Jenkinson, R., Mulgrew, K., Prichard, I., & Lim, M. S. C. (2018). “I aspire to look and few healthy like the posts convey”: Engagement with fitness inspiration on social media and perceptions of its influence on health and wellbeing. *Public Health*, 18(1002), 1–11. <https://doi.org/10.1186/s12889-018-5930-7>
- Rey, F. G. (2005). *Pesquisa qualitativa e subjetividade: Os processos de construção da informação*. Cengage Learning.
- Rounsefell, K., Gibson, S., McLean, S., Blair, M., Molenaar, A., Brennan, L., Truby, H., & McCaffrey, T. A. (2019). Social media, body image and food choices in healthy young adults: A mixed methods systematic review. *Nutrition & Dietetics*, 77(1), 19–40. <https://doi.org/10.1111/1747-0080.12581>
- Rodgers, R. F., Laveway, K., Campos, P., & Carvalho, P. H. B. (2023). Body image as a global health concern. *Cambridge Prisms: Global Mental Health*, 10(e9), 1–8. <https://doi.org/10.1017/gmh.2023.2>
- Schaefer, L. M., Burke, N. L., Anderson, L. M., Thompson, J. K., Heinberg, L. J., Bardone-Cone, A. M., Neyland, M. K. H., Frederick, D. A., Anderson, D. A., Schaumberg, K. N., Amanda, S., Cristina, D., Helga, K. K. L., Vercellone, A. C., & Paxton, S. J. (2019). Comparing internalization of appearance ideals and appearance-related pressures among women from the United States, Italy, England, and Australia. *Eating and Weight Disorders*, 24(5), 947–951. <https://doi.org/10.1007/s40519-018-0544-8>
- Silva, A. F. L., Cohen, G., & Gaymard, S. (2020). Images and social representations of students’ identity and university experience. *Papers on Social Representations*, 29(2), 12.1–12.23. <https://psr.iscte-iul.pt/index.php/PSR/index>
- Silva, A. F. L., Barreira, L. C., & Baptista, I. (2021). Images of women and non-formal education: Body representations in the illustrated press. *Educação e Cultura Contemporânea*, 18(54), 597–615. <https://doi.org/10.5935/2238-1279.20210077>
- Silva, A. F. L., Johann, M. M., Santos, O. C. S., & Brunoni, C. (2024). Women’s body representations across the life course: a comparative study in Southern Brazil. *Journal of Women & Aging*, 36(1): 33–44. <https://doi.org/10.1080/08952841.2023.2228154>
- Stenzel, L. M., Saha, L. J., & Guareschi, P. (2006). To be fat or thin? Social representations of the body among adolescent female students in Brazil. *International Education Journal*, 7(5), 611–631.
- Tiggemann, M., & McCourt, A. (2013). Body appreciation in adult women: Relationships with age and body satisfaction. *Body Image*, 10(4), 624–627. <https://doi.org/10.1016/j.bodyim.2013.07.003>

- Tiggemann, M., & Slevec, J. (2012). Appearance in adulthood. In N. Rumsey & D. Harcourt (Eds.), *The Oxford handbook of the psychology of appearance* (pp. 142–159). Oxford University Press.
- Tiggemann, M., & Zaccardo, M. (2015). “Exercise to be fit, not thin”: The effect of fits inspiration imagery on women’s body image. *Body Image*, 15, 61–76. <https://doi.org/10.1016/j.bodyim.2015.06.003>
- Vergès, P. (1992). L’evocations de l’argent: Une méthode pour la definition du noyau central de une representation. *Bulletin De Psychologie*, 45(405), 203–209.