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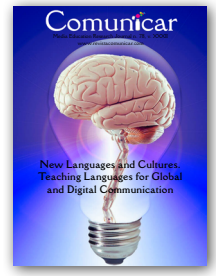

The Self-representation of People with Disabilities on Instagram

La Autorrepresentación de Las Personas con Discapacidad en Instagram

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ABSTRACT
The physical appearance of many people with disabilities leads them to feel stigmatised for not conforming to socially imposed ideals of beauty. These aesthetic standards convey lifestyles on Instagram that attract the attention of young audiences. In this regard, previous research has pointed out that people with disabilities also post self-representative images that are leading to new stereotypes of beauty with a potential impact on users without impairments. The aim of this research was to measure the attention and emotional intensity generated by a selection of posts on Instagram made by people with disabilities, in which they display their body image for aesthetic purposes, both in terms of beauty and fashion. Two neurocommunication techniques, eye tracking and galvanic skin response, were used on a sample of 120 Spanish and Portuguese university students who are regular Instagram users. The results indicate that young people without disabilities focus their attention on aspects of the image that clearly show a person's disability, especially regarding specific features, yet there were no appreciable changes in emotional intensity. The findings also highlight the need to integrate heightened awareness and sensitivity regarding the image of people with disabilities by using a cross-curricular approach in the educational system in order to promote full inclusion.

RESUMEN
La apariencia física de muchas personas con discapacidad ha marcado su estigmatización por no responder a los ideales de belleza impuestos socialmente. Estos cánones estéticos vehiculan la representación de estilos de vida en Instagram y acaparan el interés de audiencias jóvenes. Al respecto, investigaciones previas han señalado que las personas con discapacidad también publican imágenes de autorrepresentación que están contribuyendo a generar nuevos estereotipos de belleza con un potencial impacto en usuarios sin discapacidad reconocida. El objetivo de esta investigación fue medir la atención e intensidad emocional que despiertan una selección de publicaciones en Instagram realizadas por personas con discapacidad, y en las que exhiben su imagen corporal con fines eminentemente estéticos, tanto de belleza como de moda. Se han utilizado dos técnicas de neurocomunicación, el «eye tracking» y la respuesta galvánica de la piel, aplicadas a una muestra de 120 universitarios españoles y portugueses usuarios habituales de Instagram. Los resultados sugieren que los jóvenes sin discapacidad continúan registrando una atención focalizada hacia los aspectos de la imagen que exteriorizan la discapacidad, especialmente cuando se trata de rasgos explícitos, sin que existan sobresaltos notables en la intensidad emocional. Estos resultados inciden en la necesidad de integrar la concienciación y la sensibilización sobre la imagen de las personas con discapacidad de forma transversal en el sistema educativo para contribuir a la plena inclusión.

KEYWORDS / PALABRAS CLAVE
Self-representation, Disability, Body Image, Instagram, Neuroscience, Eye Tracking.
Autorrepresentación, Discapacidad, Imagen Corporal, Instagram, Neurociencia, Seguimiento Ocular.

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1. Introduction

The negative image of people with disabilities conveyed by the traditional media is that of a group which is somehow different and less worthy (Kolotouchkina et al., 2022; Oliver, 2004; Stewart & Spurgeon, 2020). This biased representation has influenced the social perception of audiences (Cunha & Pinto, 2017; Shioume & Ito, 2022; Von-Sikorski, 2014), despite the efforts of the Nations (2007) to eradicate this stigma, commonly referred to as ableism (Campbell, 2009), and to recognise the rights of people with disabilities. Faced with this situation, social networks are capable of bringing disability out of the shadows by dismantling stigmatising stereotypes and disseminating inclusive values (Bonilla-del-Río et al., 2022; Mitchell et al., 2021). However, these platforms also have the potential to reinforce the negative image of disability imposed by the historically dominant legacy media (Rojas-Torrijos & Ramon, 2021).

Within various social prejudices shaped by ableism, the physical appearance of people with disabilities has been one of the most prominent factors in their stigmatisation. In human relations, the concept of beauty is based on a perception that is culturally constructed, which changes with each different era (Del Blanco, 2023). As a result, many people with disabilities continue to face discrimination for not conforming to the ideals of physical beauty (Hahn, 1988), due to their having a body that is supposedly imperfect or disabled (Skarstad & Stein, 2018). Interest in beauty and fashion among younger audiences who use Instagram (IAB Spain, 2019), with regard to representing their lifestyles (Shumaker et al., 2017), has fostered aesthetic ideals that could lead to body dissatisfaction (Baker et al., 2019) with negative health consequences (Arendt, 2018; Hendrickse et al., 2017; Mañas-Viniegra et al., 2020). As people with disabilities seem to be driven by this attraction to the visual self-representation of one's everyday life, this group is also starting to publish images of themselves (Barry & Nesbitt, 2023; Bonilla-del-Río et al., 2022; Bonilla del Río et al., 2022), which convey an ideal of 'diverse' beauty with the potential to generate interaction. However, these research studies have focused on the effects that self-representation has on disabled people themselves and, although it has been confirmed that their appearance causes reactions in the general population (Shpigelman & HaGani, 2019), the effects on users without disabilities has not been explored in depth.

People with disabilities have found Instagram to be a space for 'visual activism', where they can exercise their right to be seen (Mirzoeff, 2006), and where they can raise awareness of aesthetic diversity through the positive representation of their own bodies (Cohen et al., 2019; Hill, 2022). However, in order to curb the dominant discourse on disability and integrate disabled people into the mainstream standards of beauty (Hill, 2022), they must make their disability visible in their interactions (Bowker & Tuffin, 2002). Therefore, it is essential to understand the reactions of non-disabled users to self-representation posts by people with disabilities on a visual social network such as Instagram. Consequently, by using eye tracking and emotional metrics through galvanic skin response, the main objective of this research is to measure the cognitive perception that the self-representation of people with disabilities on Instagram produces in young non-disabled users, in order to reveal some cognitive patterns related to diverse perceptions of beauty.

2. Background: Stereotypes of Beauty and the Representation of People with Disabilities on Instagram

On Instagram, ideals of beauty attract more attention and produce higher emotional intensity among young people than imperfections (Mañas-Viniegra et al., 2020). Some disabled users seek social approval in their posts which, in association with their low self-esteem (Ahadzadeh et al., 2017; Etgar & Amichai-Hamburger, 2017; Martinez-Pecino & Garcia-Gavilán, 2019), is a response to the prevailing standards of beauty, leading them to worry about their appearance in the eyes of others (Baker et al., 2019; Salomon & Brown, 2019). Despite the risks, Instagram can assist in challenging the established aesthetic standard of perfection so as to encourage satisfaction with one's own body among its users (Clayton et al., 2017; Cowles et al., 2023; Slater et al., 2019), and to raise awareness of the need to accept all body types (Cohen et al., 2019). The continuous exposure to stimuli depicting various types of physical appearances improves the audience's attitude toward new forms of beauty (Zajonc, 1968), and enhances young people's acceptance of these alternate styles (Halliwell & Diedrichs, 2014). Thus, Instagram can provide a groundswell of awareness that could make aesthetic diversity more visible. This, in turn, might counteract prejudice toward the physical image of some groups, thereby overcoming cognitive bias associated with the various degrees of body dissatisfaction (Rodgers & DuBois, 2016).

Historically, people with disabilities have been stigmatised for not conforming to the dominant aesthetic ideals of physical beauty (Hahn, 1988). Their bodily appearance has been culturally rejected and has resulted in discrimination based on the assumed imperfection of their bodies and/or their hypothetical disability (Skarstad & Stein, 2018). This type of signalling is contextualised in the theory of ableism, which critically examines the marginalisation suffered by this group as a result of their disabilities (Campbell, 2009).

Social networks make it possible to address ableism by promoting a social model of disability (Riddle, 2020), through the recognition of people beyond their disabilities based on values that guarantee their dignity in life (Berghs et al., 2019). In this sense, people with physical disabilities have found social media to be a source of support that is informational, instrumental, and social, which has had a positive impact on their mental health (Lee & Cho, 2019). People with intellectual disabilities have also experienced positive results from these virtual spaces, which have allowed them to expand their circle of friends, enjoy interaction, enhance their self-esteem, and develop a social identity (Caton & Chapman, 2016; Weber et al., 2023). Likewise, influencers with Down's syndrome have also found social media to be a place to promote their interests, interact with their followers, and encourage respect for diversity (Bonilla-del-Río et al., 2022).

Self-representation has been used as a strategy to reshape the mental image of disability among non-disabled audiences and to achieve a certain level of visibility through empathy (Bissell et al., 2022). This so-called 'visual activism' has been expanded to other forgotten audiences, in order for diversity to be seen as natural, which will result in recognising social equality (Garland-Thomson, 2009) and the right for everyone to be seen (Mirzoeff, 2006) on equal terms (Bottici, 2014). Within this approach, the body positivity movement of people with disabilities has developed on social media for the purpose of integrating this social group into the standards of beauty (Hill, 2022). Such initiatives have encouraged people with visually discernible disabilities to diffuse their lifestyles in order to reflect their growing interest in fashion and beauty, and to encourage the dominant discourse to be more in line with social inclusion (Bonilla-del-Río et al., 2022; Bonilla del Río et al., 2022). Barry and Nesbitt (2023) have revealed that queer people with disabilities are interested in creating their own ways of dressing in order to dismantle dominant structural mindsets related to gender, disability and fashion. However, if this movement is to be effective, people with disabilities must be aware of their own impediments and not hide them in their interactions on social networks (Bowker & Tuffin, 2002). Specifically, social media enables people with disabilities to be in control (Pacheco et al., 2019) with regard to how and when they post content about their disability in each situation.

The visual representation of any group contributes to its visibility and fosters both its social and public acceptance, due to the fact that its communicative purpose encourages inclusion (Delicath & DeLuca, 2003). However, it seems that the self-representation of people with disabilities still has not resulted in their being considered normal, like any other person, and they continue to be seen as either heroes or victims (Crow, 2014).

3. Materials and Methods

The overall objective of this research is to use neurocommunication techniques to identify the cognitive perception that non-disabled Spanish and Portuguese students have regarding the self-representation of young people with disabilities on Instagram, in terms of beauty. Based on the main objective, the following secondary objectives are as follows:

(1) Determine the attention and emotional intensity experienced by non-disabled people when exposed to the self-representation of people with disabilities.
(2) Analyse whether or not there are statistically significant differences between Spanish and Portuguese subjects.
(3) Determine any possible gender differences between male and female subjects.

The method used to carry out this research is neurocommunication (Cuesta-Cambra et al., 2017), an applied discipline of neuroscience which, combined with psychology and economics (Madan, 2010), has consolidated its scientific scope in recent years (Morin, 2011) in areas such as consumer behaviour

and effectiveness of advertising stimuli (Lee et al., 2007; Plassmann et al., 2012). Neurocommunication enables the recording of participants' unconscious reactions to socially uncomfortable topics, or to issues that they are unable to identify or recognise, thereby reducing the bias inherent to surveys and focus groups (Ariely & Berns, 2010). Consequently, this instrument has generally enhanced the quality of research associated with its use.

In this study, two non-invasive research techniques were combined (Critchley, 2002; Duchowski, 2017): Firstly, the biometric technique of eye tracking was used to record the attention received by the areas of interest (AOI) in each stimulus, based on eye movements, which can either fixate their attention or simply pass over, or even ignore, what is displayed; Secondly, galvanic skin response (GSR) was used to identify the emotional intensity of the subjects when visualising stimuli based on phasic changes experienced in sympathetic neuronal activity by detecting changes in the electrical conduction of the skin. The combination of both techniques is 70-80% effective in predicting behaviour (Plassmann & Karmarkar, 2015; Varan et al., 2015), and they have been used in previous studies to analyse beauty stimuli on Instagram, similar to the stimuli proposed in the present article (Mañas-Viniegra et al., 2020).

The incidental sample consisted of 120 non-disabled Instagram users, all of whom were young university students who were 50% Spanish and 50% Portuguese. The sample was balanced between men and women, with the average age being 21 years, and the subjects were arbitrarily recruited from the Communication Faculties of Complutense University of Madrid and Nova University of Lisbon. The sample size has been validated by previous neuroscience research, which has established reliable conclusions with samples of between 15 and 50 subjects (Kerr-Gaffney et al., 2019). Comparisons of Spain and Portugal have also been carried out in previous research, due to the fact that two neighbouring countries, though socially and culturally related, might exhibit different attitudes and perceptions on issues that are constantly evolving (Zamith et al., 2021). In this case, non-disabled subjects were selected because of the possibility that they may have experienced negative perceptions of people with disabilities, due to their potential exposure to biased representations in the mainstream media (Von-Sikorski, 2014). The fieldwork was conducted in Madrid and Lisbon from June to September of 2022, with the informed consent of the participants, who participated voluntarily and anonymously, in accordance with the Declaration of Helsinki.

The research instruments used included a Gazepoint GP3HD 150 Hz eye tracking device, as well as a Gazepoint Biometrics GSR, after which the collected data was analysed using Gazepoint Analysis UX Edition v.5 software. The statistical analysis was performed using the SPSS v.28 software programme, by applying the Kolmogórov-Smirnov test for normality and the parametric ANOVA to reveal statistically significant differences between the variables.

After a content analysis of social network material had been carried out in previous phases of the research, eight stimuli were selected, which included different types of disabilities taken from the self-representations of the beauty features of disabled people, after which the areas of interest (AOI) to be analysed were established (Table 1) according to the parts of the body shown by the person with the disability. A natural viewing was simulated, in which subjects were presented with real Instagram stimuli on different topics in which the stimuli selected for this research were randomly placed. The maximum viewing time for each stimulus was 10 seconds, with a 3-second pause using a black screen between stimuli, so that there was no continuity of attention and emotion from the previous stimulus, although participants could omit stimuli that was not of interest to them. Participants were aware at all times of the overall objective of the research in which they were participating, so as to avoid bias in their responses.

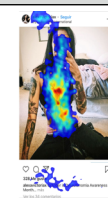
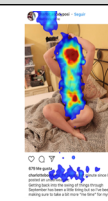
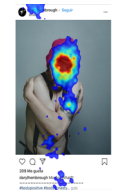
The dependent variables were the levels of attention and the peaks of emotional intensity experienced by the subjects in response to their exposure to the stimuli (S) presented. The independent variables were the origin of the participants (Spanish or Portuguese) and their gender. Their age and socio-cultural backgrounds were homogeneous. A qualitative assessment resulted from the use of attention heat maps, while a quantitative analysis was achieved with the four following parameters: the time elapsed in seconds from the presentation of the stimulus to first eye fixation (TFF); total fixation duration (TFD); fixations count (FC); and the peaks of emotional intensity in GSR.

4. Results

Real-time heatmaps (Table 1) have revealed that images were the areas of interest that attracted the most attention within the collection of features that comprise the posts on Instagram. In the moments when attention was focused on the face, the level of attention was higher toward the faces in which the features of the disability were more obvious, on the one hand, and toward those in which there was a disability that was not visible on the face. However, in general, what stood out was the beauty and fashion features. In the latter case, it was noted that the intensity of the attention extended to the entire body when the individual posed in underwear.

In any case, it is striking that 14.17% of the subjects decided not to view the stimuli of people with disabilities, which were randonmly mixed in with others, indicating that a certain minority of people reject outright those who do not comply with the stereotypical standards of beauty.

Table 1: Heat Maps.

S1	S2	S3	S4
			
AOI 1–Image; AOI 2–Chest; AOI 3–Wheelchair and legs; AOI 4–Complete stimulus	AOI 1–Image; AOI 2–Chest; AOI 3–Wheelchair and legs; AOI 4–Complete stimulus	AOI 1–Image; AOI 2–Chest; AOI 3–Legs; AOI 4–Complete stimulus	AOI 1–Image; AOI 2–Chest; AOI 3–Legs; AOI 4–Complete stimulus; AOI 5–Face
S5	**S6**	**S7**	**S8**
			
AOI 1–Image; AOI 2–Chest; AOI 3–Legs; AOI 4–Complete stimulus; AOI 5–Face	AOI 1–Image; AOI 2– Face; AOI 3– Chest; AOI 4–Complete stimulus	AOI 1–Image; AOI 2– Face; AOI 3– Chest; AOI 4–Complete stimulus	AOI 1–Image; AOI 2– Face; AOI 3– Chest; AOI 4–Complete stimulus

Source: created using Instagram content and Gazepoint software.

When comparing the areas of interest that included the faces with obvious disabilities (Table 2), it was observed that the man with the most noticeably disabled features on his face (S7) received the fastest first attention, the longest total duration, and the highest number of eye fixations, all with statistically significant differences in comparison to the other faces. This was followed by the two other stimuli that most clearly showed physical features of a disability. On the one hand, S8 had the second fastest visualisation, followed by S6. On the other hand, S6 had the second longest total attention duration.

S5 was the image that took the longest time to first visualisation, had the shortest total duration, and the lowest number of eye fixations. Although the protagonist in S5 has facial features typical of Down's syndrome, they do not seem to stand out in the scene, as there are other distractions such as objects furnishing the room, the print on his T-shirt, mismatched socks (a gesture toward International Down's Syndrome Day), as well as his face, referring to his hairstyle, glasses and goatee. In short, a combination of beauty and fashion seems to be displayed, which prevents the obviously disabled facial features from taking centre stage, even if these features are clearly present in the self-representation.

The female's face in S4 was also striking for low level of attention it received, both in terms of time to first viewing and total duration of attention. In this case, it should be kept in mind that not only was the woman's disabled facial features less obvious, but within her display of alluring body movements and a self-representation of beauty, she was dressed only in underwear.

Table 2: Differences in Attention Directed at the Face.						
Average	S4–AOI 5	S5–AOI 5	S6–AOI 2	S7–AOI 2	S8–AOI 2	p-value
TFF	0.758	1.481	0.688	0.473	0.618	*<0.001
TFD	1.151	1.054	1.697	2.115	1.333	*<0.001
FC	3.46	2.99	4.50	6.03	3.00	*<0.001

*Note: *p<0.05.

Moreover, the Spanish participants focused their attention on the face for a longer duration (TFD=1.455 vs 0.841; p=<0.001) and on more occasions (FC=4.03 vs 2.88; p=0.001) than the Portuguese, regarding the woman in the aforementioned image S4, with statistically significant differences. Also, women focused significantly more attention on this image than men (TFD=1.247 vs. 0.878; p=0.0041).

Next, the faces that show specific external features of specific syndromes underwent a pairwise comparison (Table 3), starting with the two in which they are least obvious. It was observed that image S6, a stimulus in which the face is more clearly visible due to the absence of glasses and a goatee, attracted significantly earlier first attention, with a longer duration and more fixations than S5.

The pairwise comparison between S7 and S8 (Table 3), which showed the most obvious facial features, yielded a similar result. S7 attracted significantly more attention in time to first fixation, total duration and number of fixations.

Table 3: Differences in Attention Focused on Faces with Specific Features.						
Average	S5–AOI 5	S6–AOI2	p-value	S7–AOI 2	S8–AOI 2	p-value
TFF	1.481	0.688	*0.004	0.473	0.618	*0.041
TFD	1.054	1.696	*<0.001	2.115	1.333	*<0.001
FC	2.99	4.50	*<0.001	6.03	3.00	*<0.001

Regarding both S5 and S6, the Portuguese had the shortest time to first fixation compared to the Spanish subjects, with statistically significant differences (TFF S5=0.834 vs 2.287; p=0.004. TFF S6=0.390 vs 1.037; p=0.002). Men stood out for displaying a faster first attention (TFF=0.587 vs 1.826; p=0.026) and a higher number of fixations (FC= 4.00 vs 2.64; p=0.006) toward the face of S5, with statistically significant differences compared to the women. There were no significant differences between the Spanish and Portuguese subjects when analysing S7 and S8, but there were significant differences by gender, with males showing a shorter duration of attention to the face of S7 (TFD=1.418 vs. 2.361; p=0.003).

People with physical disabilities attracted the least attention to the chest (Table 4). The woman in a wheelchair wearing an evening dress (S1) was the stimulus with the shortest duration of attention and the second lowest number of eye fixations. The other woman with a physical disability (S2), despite posing in lingerie, received one of the lowest levels of attention toward her chest, with the same number of eye fixations as S1.

In both S6 and S8, who wore clothes with neutral designs and colours, modest levels of attention were obtained, especially in S8, which received the lowest level of attention in number of fixations and the second lowest in time to first fixation and total duration.

S3 and S4 were the stimuli that received the most attention, featuring two women facing the camera, and dressed only in underwear. In the case of S3, the electrodes of the woman's treatment were shown, which caught the attention of the participants with the fastest first fixation, the highest number of eye fixations, and the second longest total duration of attention. S4 recorded the longest total duration of attention and the second-best results in terms of first fixation and number of fixations. When first comparing S1, and secondly S2, the area of interest of the chest compared to that of the wheelchairs/legs displayed no statistically significant differences.

Table 4: Differences in Attention Focused on the Chest.									
Average	S1–AOI2	S2–AOI2	S3–AOI2	S4–AOI2	S5–AOI2	S6–AOI3	S7–AOI3	S8–AOI3	p-value
TFF	0.366	0.425	0.222	0.307	0.747	0.384	0.346	0.436	*<0.001
TFD	1.633	1.890	2.962	3.711	2.512	2.314	2.578	1.843	*<0.001
FC	5.09	5.09	9.99	9.40	6.67	6.29	7.92	4.20	*<0.001

Men registered a shorter duration of attention on the chest than women, both in S1 and S2, with significant differences (TFD S1=1.222 vs 1.778; p=0.012. TFD S2=1.363 vs 2.076; p=0.016). The Spanish participants viewed both stimuli for a significantly longer time than the Portuguese subjects (TFD S1=1.876 vs. 1.387; p=0.012. TFD S2=2.303 vs. 1.471; p=0.001).

Moreover, with regard to S3, the Spanish participants showed a significantly longer total duration of attention and a higher number of fixations (TFD S3=3.519 vs. 2.395; p=<0.001. FC S3=11.45 vs. 8.51; p=<0.001).

Regarding S4, female participants displayed longer attention duration (TFD=2.990 vs 2.918; p=0.033) and more fixations (FC=9.98 vs 7.77; p=0.047) than the males, with statistically significant differences. The Portuguese, on the other hand, focused significantly more attention on this particular stimulus than the Spanish subjects (TFF=0.257 vs. 0.362; p=0.044).

When comparing attention focused on the chest in S3 and S4, in which both women faced the camera dressed only in underwear, the first one displaying treatment electrodes for a specific syndrome showed significantly faster first attention (TFF=0.222 vs 0.346; p=0.044), longer total duration (TFD=2.962 vs 2.578; p=0.045), and a higher number of fixations (FC=9.99 vs 7.92; p=<0.001). In both cases, the total duration of attention and number of fixations by Spanish participants was significantly higher than the Portuguese (p=0.001).

In the areas of interest involving the legs (Table 5), the stimuli in which the protagonists represented themselves in wheelchairs stood out, with no major differences regarding the fact that those in wheelchairs posed in an evening dress and the others posed with a side view in lingerie. Thus, S1 obtained the highest number of fixations, together with the second fastest fixation, and the second longest total duration of attention. On the other hand, S2 registered the first fastest attention and the highest number of fixations, together with the second highest total duration.

The legs that received the least attention were those of S3 and S4, in which the two women were shown frontally in their underwear, and there was not much difference despite the fact that the underwear of the former was partially covered by a pair of trousers, whereas the underwear of the latter was completely uncovered.

Table 5: Differences in Attention Toward the Legs.						
Average	S1–AOI 3	S2–AOI 3	S3–AOI 3	S4–AOI 3	S5–AOI 3	p-value
TFF	1. 420	1.385	3.013	2.613	2.196	*<0.001
TFD	1.006	0.979	0.206	0.484	0.888	*<0.001
FC	3.68	3.73	1.08	2.13	2.78	*<0.001

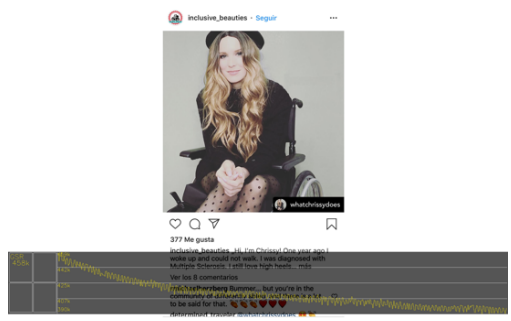
Regarding S2, in which the woman posed in lingerie, there were no significant differences between men and women, but there were significant differences between the Spanish and Portuguese, with the former registering a later first attention (TFF=1.936 vs 0.768; p=<0.001), but with a longer total duration (TFD=1.259 vs 0.694; p=0.002) and a higher number of fixations (FC=4.28 vs 3.17; p=0.033).

Men focused their attention later on S3 (TFF=3.942 vs 2.225; p=0.008) with a shorter total duration (TFD=0.212 vs 0.580; p=<0.001) and fewer fixations (FC=1.16 vs 2.47; p=<0.001) compared to the attention focused on the bare legs of S4, which was contrary to the attention placed by the female sujects, with statistically significant differences.

Although the upper and lower GSR peaks (Table 6) of emotional intensity did not show statistically significant differences, some parameters that differed from the emotional stability that characterised

the visualisation of the stimuli are noteworthy, as it decreased only in the last seconds of the maximum time allowed for visualisation, which is a frequent consequence of the gradual loss of interest in each stimulus. On the one hand, stimulus 7, which showed the most obviously disabled facial features, had the lowest level of emotional intensity. On the other hand, there were two stimuli in which the emotional intensity continuously decreased from the beginning of the visualisation: these included stimulus 1, which showed a woman in a wheelchair wearing an evening dress, and stimulus 3, which showed a woman in underwear with electrodes to treat a specific syndrome. These emotional intensity data, in combination with the attention data analysed, indicate a certain indifference and lack of involvement of the subjects with these new self-representations of people with disabilities, which are far removed from standard precepts of beauty.

Table 6: GSR Peaks.

S1	S2
	

Note: The complete table can be found in Mañas-Viniegra et al. (2023).
Source: created by using Instagram images and Gazepoint software.

5. Discussion and Conclusions

The findings of this study suggest the persistence of stigmas associated with people with disabilities, as they continue to be seen as somehow different (Stewart & Spurgeon, 2020) in the minds of young audiences. Regarding objective 1, which aimed to determine the attention and emotional intensity registered by the subjects in relation to the self-representation of people with disabilities, it was found that the image drew the most attention within the profile, confirming the playful and graphic nature of Instagram, where normative identity-focused representations dominate (Arévalo Iglesias & Martínez López de Castro, 2021).

The results indicate that the obvious features of disability continue to capture the attention of non-disabled people, despite the emotional indifference shown, and this situation perpetuates social stigmas that are used to point out differences (Campbell, 2009). Some of the data registered make certain sense, given the fact that the platform involved in this study is a space where younger audiences are superficial and frivolous in perceiving stereotypes of beauty. Moreover, they place a high value on images of other users that are retouched to perfection (Kleemans et al., 2018), and they tend to compare themselves to the stimuli they view (De Perthuis & Findlay, 2019; Harris & Bardey, 2019). Thus, it has been observed that faces with obviously disabled features received the most attention. In fact, the face with the most obvious indications of a specific syndrome received the most attention, despite the fact that the stimulus as a whole, including the profile, image, text, and interaction received the least attention. Along the same lines, when two women posed in two separate stimuli, facing the camera and dressed only in underwear, attention was significantly higher toward the electrodes for the treatment of a specific syndrome on the chest of one of them, which confirms the decreasing emotional intensity when viewing them. In any case, the chest of both of them received the highest score in terms of attention compared to other areas of interest.

On the other hand, people with disabilities who were more modestly dressed, without any special scenography, and those who represented themselves in terms of fashion rather than beauty, were much less noticed, even when they had obvious features of a disability. This was especially the case with a physically disabled person dressed in evening wear who registered decreasing emotional intensity from the very first moment and, together with the other person with physical disability, attracted the least attention toward

the chest, including the one that posed in lingerie, compared to all the other stimuli. However, the legs/wheelchair combination attracted more attention to this area than any other stimulus which, once again, shows that the obvious features of disability are more highlighted than other areas.

Among other noteworthy findings that complete the analysis, it has been discovered that nearly 15% of the subjects in the sample showed no interest in viewing the self-representation posts of people with disabilities on Instagram, yet they paid attention to other types of stimuli presented, confirming the interest of young people on Instagram in beauty and fashion (IAB Spain, 2019), and their indifference to disability. This lack of interest might be due to the social impact that the traditional media has had on the stigmatisation of disability (Cunha & Pinto, 2017; Oliver, 2004; Shioume & Ito, 2022).

With regard to objective 2, which involved analysing whether there are statistically significant differences between the Spanish and Portuguese subjects, it was revealed that the chest of the two women posing in underwear, and the two women with physical disabilities, received significantly more attention from the Spanish participants. This is probably due to the diversification of standards in Spain being more evolved as a result of a longer and more intense tradition of awareness-raising campaigns. Despite the social and cultural similarity of the two countries, this confirms that are still slight differences between the two nationalities in the cognitive perception of issues that are undergoing a process of transformation (Zamith et al., 2021).

In the case of objective 3, which aimed to determine the existence of gender differences between the subjects, this supposition was verified by showing that men visualised the faces with the most obviously disabled features for a shorter time, with statistically significant differences compared to women. Therefore, it seems that men might have less tolerance when it comes to visualising images that display more non-standard canons of beauty. There were no significant gender differences in the attention shown to the chest of women posing in their underwear, so it seems that certain prejudices are starting to be eradicated.

Overall, these findings indicate that although the visual representation of any group contributes to their visibility and fosters public acceptance (Delicath & DeLuca, 2003), people with disabilities are still waiting for their impediments to be normalised and accepted (Crow, 2014). In this sense, the stigma that disabled people suffer continues to foment discrimination against them for not fulfilling the dominant standards of beauty (Hahn, 1988), and for having a hypothetically 'flawed' body (Skarstad & Stein, 2018). Therefore, contrary to previous research, Instagram has still not fulfilled its role as the instrument envisioned for eradicating stigmas associated with disability (Mitchell et al., 2021). Despite the efforts of influencers with physical or cognitive disabilities to develop and disseminate inclusive values (Bonilla-del-Río et al., 2022), it appears that young Instagram users continue to respond negatively to images of disability, which mirrors the traditional dissemination by the legacy media (Rojas-Torrijos & Ramon, 2021). Therefore, although social networks have the potential to contribute to more inclusive societies, they are also spaces of confrontation that require more education capable of shaping digital citizenship that is critical and discerning (Barroso Moreno et al., 2023).

The main limitations of this research is that the sample is not representative, nor was its selection carried out by a method other than convenience, despite the fact that the criteria and methodology are based on hypotheses that are present in scientific literature. In future research, it would be interesting to delve deeper into the reasons why people with disabilities fail to exercise their right to be seen (Mirzoeff, 2006), in light of the trend toward 'visual activism' (Garland-Thomson, 2009). Such actions would raise awareness of aesthetic diversity through the self-representations of disabled people themselves (Bowker & Tuffin, 2002; Cohen et al., 2019; Hill, 2022). In conclusion, one could argue that disabled people are trapped in contradictory visual representations, which continures to foment their invisibility (Crow, 2014). In spite of this, however, they need to be understood from a human perspective, which would allow them to assert their value and ensure their full participation and acceptance in modern society (Kolotouchkina et al., 2022; Llorente-Barroso et al., 2023).

Author Contribution

Idea, L.M.V., C.L.B.; Literature review (state of the art), L.M.V., C.L.B., M.V.A.; Methodology, L.M.V., C.L.B., I.F.; Data analysis, L.M.V., C.L.B., I.F.; Results, L.M.V., C.L.B., I.F., M.V.A.; Discussion and conclusions, C.L.B., M.V.A.; Writing (original draft), L.M.V., C.L.B.; Final revisions, I.F., M.V.A.; Project design and sponsorship, L.M.V., C.L.B., M.V.A.

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