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Special

Consumer identities and clothing style confidence: obstacles to frugal fashion and sustainable clothing consumption

Identidades de consumo e confianza no estilo de vestir: obstáculos para a moda frugal e o consumo de roupa sostible

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Abstract

High levels of textile consumption and waste have made the fashion industry one of the most polluting sectors, highlighting the need to understand the factors influencing clothing consumption. This study aims to develop a comprehensive instrument to measure clothing consumption, adapt the Clothing Style Confidence Scale for use in a Spanish-speaking context, and explore explanatory models of sustainable clothing consumption. Using a convenience sample of 500 participants, including psychology undergraduate students from a Spanish public university, data was collected through an online questionnaire. The new instrument includes four dimensions: quantity of consumption, focus on fashion, focus on quality, and product disposal. The Clothing Style Confidence Scale was adapted through confirmatory factor analysis. Structural equation modeling was used to test a model examining the influence of consumer identities, environmental self-identity, frugal behavior, and clothing style confidence. The model explained 66% of the variance in clothing consumption, with style confidence and wasteful consumer identity as the strongest predictors.

Keywords: Clothing consumption; Clothing style confidence; Frugal behavior; Environmental self-identity; Consumer identities.

Resumo

Os elevados niveis de consumo e residuos téxtiles converteron á industria da moda nun dos sectores máis contaminantes, o que pon de manifesto a necesidade de comprender os factores que inflúen no consumo de roupa. Este estudo pretende desenvolver un instrumento integral para medir o consumo de roupa, adaptar a Escala de Confianza no Estilo de Vestir para o seu uso nun contexto hispano falante e explorar modelos explicativos do consumo sostible de roupa. Utilizando unha mostra de conveniencia de 500 participantes, incluíndo estudantes de licenciatura en psicoloxía dunha universidade pública española, recolléronse datos a través dun cuestionario online. O novo instrumento inclúe catro dimensións: cantidade de consumo, enfoque na moda, enfoque na calidade e eliminación do produto. A Escala de Confianza no Estilo de Vestir adaptouse mediante unha análise factorial confirmatoria. Utilizouse un modelo de ecuacións estruturais para probar a influencia das identidades dos consumidores, a autoidentidade medioambiental, o comportamento frugal e a confianza no estilo de vestir. O modelo explicou o 66% da varianza no consumo de roupa, sendo a confianza no estilo e a identidade de consumidor desbaldidor os preditores máis potentes.

Palabras chave: Consumo de roupa; Confianza no estilo de roupa; Comportamento frugal; Autoidentidade medioambiental; Identidades de consumo.

JEL classification: Z10; Z19.

1. Introduction

In recent years, population growth, rising incomes, and improved living standards have significantly increased the production and consumption of textile goods (Shirvanimoghaddam et al., 2020). Driven by a profit-oriented model, the fashion industry promotes rapid product turnover and frequent disposal, making it one of the most polluting sectors globally, both in terms of resource use and waste generation (Kozlowski et al., 2018).

On average, global annual textile consumption is estimated at 11.4 kg per person, the equivalent of approximately 11 pairs of jeans and 13 T-shirts. This figure rises substantially in more affluent regions, reaching 31.2 kg per person in Europe and 37.6 kg in the United States (Quantis & ClimateWorks, 2018). As consumption increases, so does waste: an estimated 70% of discarded textile products end up in landfills, making textile waste the fastest-growing category of household waste in Western countries (Fletcher, 2013). The environmental impact of clothing production is further exacerbated by the challenges of managing discarded garments sustainably, particularly regarding their recycling and reuse. For instance, Abbate et al. (2024) highlight that the diversity of fabrics and accessories used in garment manufacturing complicates end-of-life processing, with much of the sorting of recyclable and non-recyclable textiles still carried out manually due to the lack of efficient separation technologies.

According to Sadowski et al. (2021), textile production was responsible for approximately 1.025 gigatons (Gt) of carbon dioxide equivalent (CO_2e) emissions in 2019, around 2% of total annual global greenhouse gas (GHG) emissions. If left unchecked, emissions from the fashion sector are projected to rise by 50%, reaching 1.588 Gt by 2030. Notably, about 70% of these emissions stem from upstream processes such as material production, preparation, and processing (Global Fashion Agenda, 2020; 2022). These stages are predominantly powered by non-renewable energy. Current global and national climate policies are expected to result in a temperature increase of up to 3 °C by the end of the 21st century. The likelihood of limiting global warming to 1.5 °C, the target set by the 2015 Paris Agreement is now estimated at only 14% (World Meteorological Organization, 2024).

Sustainable clothing consumption is of critical importance. Clothing is not only a basic human need and a significant category of consumer spending, but also a sector closely tied to issues of social sustainability, including fair labor practices and safety standards in production (Frommeyer et al., 2022). Additionally, clothing consumption is deeply intertwined with identity formation and self-expression. Appearance plays a central role in how individuals construct and communicate their identity (Kaiser, 1997), and confidence in one's clothing choices can influence how people express themselves (Joyner Armstrong et al., 2018). This highlights a strong connection between clothing consumption patterns and personal as well as social dynamics.

The purpose of this work is to develop alternative explanatory models of textile consumption as a sustainable behavior. Specifically, it seeks to analyze factors that influence clothing consumption and those that may hinder efforts to reduce it. To this end, the research includes the development of a measurement tool for clothing consumption and the Spanish adaptation of the clothing style confidence scale. The central objective is to test a model that examines the relationship between environmental self-identity, consumer identity, and clothing style confidence with both frugal behavior and overall clothing consumption.

This paper is organized as follows: Section 2 contains the theoretical background and hypothesis development; Section 3 presents the methodology; Section 4 presents results; Section 5 presents the interpretation of the main findings and Section 6 presents concluding remarks.

2. Literature review

From a psychosocial perspective, clothing style and garment choices reflect individual characteristics and serve as a medium for expressing identity. Fashion fulfills more than just an aesthetic need, it communicates personal values, aspirations, and social belonging (Stets & Burke, 2000). The deep connection between fashion items and personal identity highlights how our possessions not only mirror but also shape who we are (Belk, 1988). As such, the relationship between identity and fashion constitutes a field of study emphasizing how clothing choices reflect both personal preferences and social norms (Crane, 2012; McNeill & Venter, 2019).

Self-concept and social identity play a central role in fashion behavior, particularly in the context of sustainability. McNeill and Venter (2019) argue that excessive fashion consumption is often linked to identity exploration, especially among young people seeking to define themselves. This process is shaped not only by social norms and general consumption behaviors but also by the desire to express individuality through fashion.

Recognizing and embracing one's personal style can foster more sustainable fashion behaviors, such as extending the life of garments and reducing textile waste. This aligns with the slow fashion movement, which advocates for thoughtful clothing choices that reflect personal identity and emphasize quality over quantity (Fletcher, 2013). For example, Cho et al. (2015) describe style consumption as a deliberate and evolving way of dressing that supports frugality and sustainable purchasing practices.

Frugality is an important factor in understanding style-conscious consumption. Lastovicka et al. (1999) define frugality as a lifestyle trait involving disciplined acquisition and resourceful use of goods and services. It entails resisting short-term purchasing impulses and creatively reusing or repurposing existing possessions. From this perspective, timeless personal style plays a crucial role in expressing individual preferences and supports frugality by reducing the frequency of new purchases and conserving financial resources. Research shows that individuals who adopt a frugal approach to clothing tend to engage in sustainable fashion behaviors, especially when guided by a strong orientation toward personal style (Gupta et al., 2019). This suggests that individuals can express identity through fashion without resorting to overconsumption, fostering more conscious and environmentally responsible consumption. From this point of view, our research hypothesizes that:

> H1. Frugal behavior significantly mediates the relationship between identity (environmental and consumer) and clothing consumption.

According to Udall et al. (2020), identity related to pro-environmental behavior can be categorized into three levels: environmental self-identity (how one sees oneself), social identity (connection to a group), and place identity (connection to a specific location). These identities influence sustainable consumption patterns, as behavior adapts to context and social expectations. Moreover, different identities may become more salient depending on the situation, guiding pro-environmental behaviors at the individual, group, or spatial level. This study focuses specifically on individual consumption behavior, emphasizing environmental self-identity.

Van der Werff et al. (2013a; 2013b) developed a general measure of environmental self-identity, defined as the extent to which individuals perceive themselves as environmentally responsible. This construct has been linked to a wide range of environmentally friendly preferences, intentions, and behaviors, including renewable energy use (Van der Werff & Steg, 2016; Van der Werff et al., 2013a; 2013b), engagement in pro-environmental actions (Ajibade

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& Boateng, 2021), reduced car usage (Culiberg et al., 2023), and ethical consumption habits such as recycling, fair trade purchases, and avoiding air travel (Gatersleben et al., 2014).

Individuals may simultaneously hold multiple identities, with certain identities becoming more prominent depending on the context (Oyserman, 2009). While environmental self-identity has been associated with a broad range of sustainable behaviors, it may not always be the most salient identity in general or clothing-specific consumption contexts. Nonetheless, evidence suggests that the degree to which individuals see themselves as likely to engage in certain behaviors significantly influences their actions (Whitmarsh & O'Neill, 2010). It is reasonable to assume that the influence of environmental self-identity on sustainable clothing consumption behaviors may be linked with other specific identities, namely consumer identities. In this regard, our research hypothesizes that:

> H2. Environmental self-identity significantly mediates the relationship between consumer identities and clothing consumption.

Reed et al. (2012) define identity as any label or category with which a consumer aligns, shaping their understanding of how they should think, feel, and act. According to consumer identity theory, individuals not only shape but also communicate their identity through their consumption choices (Dawetas & Diamantopoulos, 2016). Gatersleben et al. (2019) identified four distinct consumer identity profiles based on self-descriptions: (a) moral identity, linked to the consumption of eco-friendly, fair-trade products; (b) wasteful identity, related to impulsive and pleasure-driven consumption; (c) frugal identity, characterized by rejection of wasteful behaviors; and (d) thrifty identity, which prioritizes cost-effectiveness. Research indicates that individuals may adopt multiple, sometimes conflicting, consumer identities depending on the context. Based on the classification proposed by Gatersleben et al. (2019), it can be hypothesized that these four consumer identities are differentially related to environmental self-identity. Thus:

> H3a. Environmental self-identity is directly and positively related to thrifty and moral consumer identities.
>
> H3b. Environmental self-identity is directly and negatively related to the wasteful consumer identity.

As for sustainable fashion, the connection between identity and behavior is complex. Legere and Kang (2020) found that symbolic moral identity supports the intention to purchase slow fashion, but internalized moral identity does not predict willingness to pay more for such products. Understanding identity in the context of fashion consumption offers deeper insight into purchasing motivations. From this perspective, clothing style confidence may act as a mediator between identity dimensions and fashion consumption. Joyner Armstrong et al. (2018) describe style confidence as the ability to express oneself through clothing and accessories, reflecting one's personality and self-concept. Studies suggest that style confidence influences both purchase intention and openness to fashion innovation (Cham et al., 2020), with individuals who feel confident in their style more likely to select clothing that reinforces identity and gains social approval (Jürgensen & Guesalaga, 2018). On the basis of this evidence, two further hypotheses can be defined:

> H4. Clothing style confidence significantly mediates the relationship between consumer identities and clothing consumption.

H5. There is a direct and positive relationship between consumer identities and clothing style confidence.

Fashion and clothing consumption behaviors are closely linked to identity, whether in terms of broad self-concepts or specific consumer identities such as moral, frugal, or environmental identity. This is increasingly important in light of the urgent need to shift consumption patterns and lifestyles toward ecological and socially sustainable practices. To better understand these relationships, robust, multidimensional instruments to measure clothing consumption are essential. Although many studies emphasize the need to reduce clothing consumption, few focus on developing comprehensive measurement instruments that support behavior change. Existing research often relies on unidimensional or narrowly focused tools, measuring only specific aspects such as sustainable purchases (Koszewska, 2016), garment disposal (Bianchi & Birtwistle, 2012; Žurga et al., 2015), or online shopping behavior (García-Salirrosas & Acevedo-Duque, 2022). Few general instruments comprehensively address clothing consumption behavior. For example, Park and Lee (2021) proposed a complex second-order scale to assess consumer awareness in sustainable textile product consumption. In contrast, Lang et al. (2013) developed a 35-item multidimensional scale measuring five dimensions: trend sensitivity, purchase frequency, awareness of quality and price, and clothing disposal. Unlike narrower tools, their scale provides a comprehensive, behavior-oriented view of clothing consumption. For this reason, the Lang et al. (2013) scale was selected as the basis for developing a new instrument better adapted to the objectives of the present study.

In sum, this study aims to:

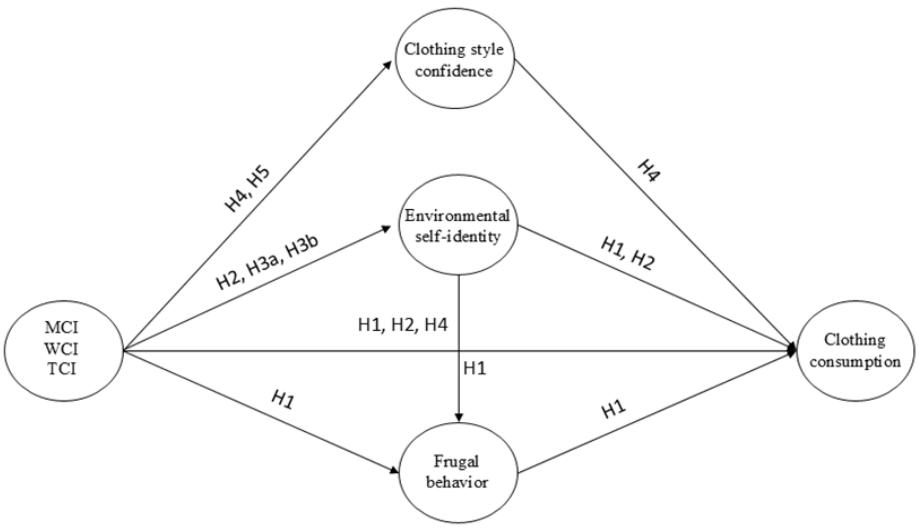
1) Develop an instrument to measure clothing consumption.

2) Adapt to Spanish language and analyze the validity of the factor structure of the clothing style confidence scale.

3) Analyze the relationship between consumer identities, environmental self-identity and its impact on clothing style confidence, frugal behavior and clothing consumption.

Figure 1 provides a visual representation of the hypothesized links between the study variables.

Figure 1. Hypothesized links between the study variables



Note: MCI, moral consumer identity. WCI, wasteful consumer identity. TCI, thrifty consumer identity.

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3. Materials and methods

This study employed a quantitative research design, using a convenience sample of undergraduate psychology students who completed an online questionnaire. The investigation followed an empirical approach, combining descriptive and causal methodologies to explore the relationships among the study variables. To address the research objectives, Confirmatory Factor Analysis (CFA) was first conducted to validate the measurement models, followed by Structural Equation Modeling (SEM) to test the hypothesized relationships and overall theoretical framework.

3.1. Participants

The study sample consisted of 500 participants, 70.6% of whom were women and 29.2% men, with ages ranging from 18 to 78 years (M = 34.62, SD = 15.09). A non-probabilistic convenience sampling method was used. The sample comprised third-year psychology undergraduates from a Spanish public university, as well as their family members and acquaintances. Table 1 provides a more detailed overview of the sociodemographic characteristics of the sample.

Table 1. Sociodemographic characteristics of participants

Sample characteristics	*n*	%	*M*	*SD*
Gender				
Women	353	70.6		
Men	146	29.2		
Age (18 - 78)			34.62	15.09
18 - 30	273	54.6		
31 - 64	210	42		
65 - 78	17	3.4		
Education level				
Unfinished primary education	14	2.8		
Primary education	33	6.6		
Secondary education	119	23.8		
Currently studying in university	135	27		
Completed university studies	199	39.8		
Employment status				
Employed	247	49.4		
Unemployed	65	13		
Studying	160	32		
Retired	28	5.6		
Monthly family income				
Under 1000€	77	15.4		
1001 – 1500€	122	24.4		
1501 – 2000€	109	21.8		
2001 – 2500€	79	15.8		
2501 – 3000€	48	9.6		
More than 3000€	65	13		

Note. N = 500.

3.2. Measuring instruments

1) Sociodemographic scale of our own design. This included data necessary to identify and describe the sample (e.g., sex, age, educational level, employment status or household income).
2) Environmental self-identity scale by Van der Werff et al. (2013a, 2013b) and adapted to Spanish by Gil-Giménez et al. (2021). The scale is composed of three items and measures the degree to which an individual considers him/herself as someone whose actions are pro-environmental.
3) Consumer identity scale by Gatersleben et al. (2019) and adapted to Spanish by Gil-Giménez et al. (2021). The instrument measures the category with which a person identifies him/herself in the role of a consumer or buyer. It is composed of 11 items written as statements to represent different categories or consumer identities following the style of "I am a buyer of...". Respondents were asked to indicate to what extent they agreed or disagreed with each of the statements that describe them as buyers. The items are grouped into three factors:
    a) Moral consumer identity, related to the consumption of organic and fair-trade products.
    b) Wasteful consumer identity, related to impulsivity and satisfaction with purchases.
    c) Thrifty consumer identity, emphasizing economic savings.
4) Frugal behavior scale by Muiños et al. (2015). This is an adaptation of the scale developed by Lastovicka et al. (1999). The instrument consists of 10 items that assess the voluntary restraint and resourceful use of goods already available to the individual.
5) Clothing style confidence scale (CSC) by Joyner Armstrong et al. (2018). The Clothing style confidence scale measures people's confidence in expressing themselves through the use of clothing and accessories. The scale consists of 22 items grouped into 5 factors:
    a) Style longevity, defined as a preference for garments that can be worn for an extended period of time, items that are timeless in nature and fit personal style.
    b) Aesthetic perceptual ability, referring to the ability to coordinate and combine clothing in an aesthetically pleasing manner.
    c) Creativity, defined as the person's interest in developing his or her own style, mixing and matching garments, in order to experiment with new outfits.
    d) Appearance importance, referring to the priority and concern for appearance and its relation to clothing style.
    e) Authenticity, defined as the degree to which the style of dress reflects the "real me".

    For use in this study, the scale was adapted to Spanish following the indications of Muñiz et al. (2013). Using a double translation model, first, the scale items were translated from English into Spanish and then back into English. This process was carried out by two independent translators. The two versions of the scale were compared without identifying inconsistencies between the items.

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6) Clothing Consumption Scale (CC) was developed for use in this study based on the Lang et al. (2013) scale which was designed to better understand the relationship between consumer characteristics and the disposal of textile and fashion products. Lang et al. (2013) identified 5 factors that influence the consumption and disposal of textile products, which compose a 35-item instrument. These factors are: sensitivity to fashion trends, frequency of fashion purchase, quality consciousness, price consciousness, and frequency of clothing disposal.

Using the list of 35 items of the Lang et al. (2013) scale, we selected for this study those items clearly related to consumption behavior, purchase or disposal of textile garments. Likewise, items with inverted values or that were written inversely to other items already selected and items that incorporated qualifiers on purchase frequency were discarded.

Following these criteria, 11 items were selected from the Lang et al. (2013) scale. The 11 items were translated into Spanish again following the guidelines by Muñiz et al. (2013), through a double translation by two independent experts with the respective comparison between the translations to check for any possible inconsistencies. A further 11 items were then drafted to conclude with a scale of 22 items, conceptually grouped according to their content in four different domains:

a) Quantity of consumption
b) Focus on fashion
c) Focus on quality
d) Disposal of products

The same instructions were used for all the instruments that composed the questionnaire; respondents were asked to indicate their level of agreement or disagreement with each statement using a 10-point scale (1 = Strongly disagree, 10 = Strongly agree).

3.3. Procedure and data analysis

The questionnaire was distributed online to undergraduate psychology students, who were also asked to share it with family members, friends and acquaintances. To recruit participants, the researchers sought the collaboration of third-year psychology students from a public university in Spain, as this group was easily accessible. However, in order to broaden the age range of the sample, students were specifically asked to invite at least one family member or acquaintance over the age of 25 to complete the questionnaire.

At the beginning of the questionnaire, participants were informed of the objectives of the study. They were assured that their personal data would be treated confidentially, that their anonymity would be preserved, that participation was voluntary, and that they could withdraw from the study at any time. Explicit consent was requested before proceeding. Participants then completed the questionnaire, which included the following instruments presented in this order: the clothing consumption scale, the clothing style confidence scale, the consumer identities scale, the frugal behavior scale, the environmental self-identity scale and finished with the sociodemographic scale.

The survey was administered through the Qualtrics data collection platform. Data collection took place between April and July 2019. Approximately 68% of the students who completed the questionnaire shared it with at least one other person.

Data analysis was conducted using IBM SPSS Statistics 24 and IBM Amos 24. Descriptive statistics and correlational analyses were performed. The internal consistency of the measurement scales was assessed using Cronbach's alpha. To provide psychometric support for the newly developed clothing consumption scale and the Spanish adaptation of clothing style confidence scale, confirmatory factor analyses (CFA) were conducted using the maximum likelihood (ML) estimation method. Structural equation modeling (SEM) was then performed, also using ML estimation, to examine the relationships among the study variables and to test the proposed theoretical model. Model fit was evaluated using normed chi-square, the Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation (RMSEA). Following the criteria established by Hu and Bentler (1999), normed chi-square values below 3 were considered acceptable, CFI values above .90 were deemed satisfactory, and RMSEA values below .10 were acceptable, with values under .05 indicating excellent fit.

4. Results

The results are presented in the following order. First, we describe our findings regarding the factor structure analysis of the clothing consumption scale. Second, we present the results on validation of the factor structure of the clothing style confidence scale. Third, we analyze the influence of clothing style confidence on clothing consumption. Finally, we present the results of the model analyzing the effects of consumer identities, environmental self-identity, frugal behavior, and clothing style confidence on clothing consumption.

4.1. Analysis of the factor structure of clothing consumption

This first subsection aimed to address our primary objective: the development of a measurement instrument for clothing consumption. First, we tested the theoretical grouping of the items composing the clothing consumption scale (CC) into four factors. This was done by means of Confirmatory Factor Analysis (CFA). Following the criteria set by Hu and Bentler (1999) the model did not present a good fit, with values CMIN/DF = 6.005; CFI = .684 y RMSEA = .100.

Following this, the decision was made to eliminate items with factor weights below .30, in order to adjust the structure of the scale. This resulted in the removal of items 5, 13, 15, 16, 17, 18, 19 and 22. After these changes, the model was tested again, obtaining an acceptable goodness of fit, with CMIN/DF = 3.794; CFI = .911 y RMSEA = .075. After verifying the covariance-related modification indices (M.I.), intrafactorial errors with M.I. greater than 10.0 were correlated (Byrne, 2016). This operation was performed between items 1 and 3, 3 and 4, 3 and 6, 7 and 9. The model improves after these changes and the goodness-of-fit indices were well within accepted norms in the literature (Byrne, 2016; Hu & Bentler, 1999) with values CMIN/DF = 2.982; CFI = .941 y RMSEA = .063.

Figure 2 shows the final factor structure of the scale composed of 14 items. Table 2 shows the final items that make up the scale in English and Spanish.

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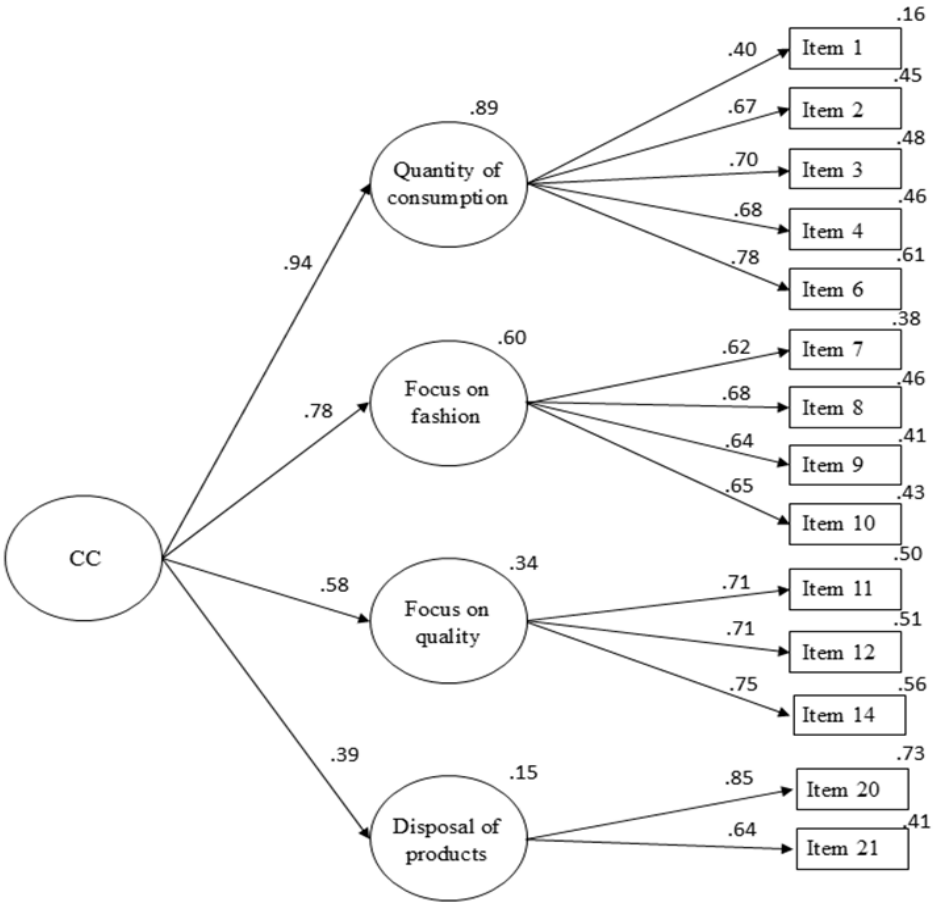
Figure 2. Factor structure of the clothing consumption scale (final structure with 14 items)



Note: Errors associated with the variables are not included in the model. CC, clothing consumption.

Table 2. Final 14 items of the clothing consumption scale in English and Spanish

English-language clothing consumption scale	Spanish-language clothing consumption scale
Quantity of consumption	Cantidad de consumo
1. I buy clothing on sale as much as possible.	1. Aprovecho las rebajas para comprar mucha ropa.
2. I buy new clothing often, even if I don't need it.	2. Compro más ropa de la que necesito.
3. I mainly buy clothing from new collections.	3. Compro principalmente ropa de nueva colección.
4. I buy clothing every season change (I buy clothing each season).	4. Compro ropa cada cambio de temporada (Compro ropa cada temporada).
6. I buy more clothing than my family and friends.	6. Compro más ropa que mis familiares y amigos/as.
Focus on fashion	Atención a la moda
7. I browse clothing online or in fashion magazines.	7. Miro ropa por internet o en revistas de moda.
8. I browse clothing stores while out walking.	8. Me dedico a ver tiendas de ropa cuando paseo.
9. I follow public figures (and influencers) on social media to keep up with the latest fashion and style trends.	9. Sigo en redes sociales a personajes públicos (e *influencers*) para conocer las últimas tendencias de moda y estilo.
10. I pay attention to how other people dress.	10. Me fijo en cómo visten las demás personas.

English-language clothing consumption scale	Spanish-language clothing consumption scale
Focus on quality	Atención a la calidad
11. I mostly buy brand-name clothing.	11. Sobre todo, compro ropa de marca.
12. I buy fewer clothes but of good quality.	12. Compro poca ropa, pero de calidad.
14. I make a special effort to choose the very best quality clothing.	14. Hago especial esfuerzo en elegir ropa de la mejor calidad.
Disposal of products	Eliminación de productos
20. I typically dispose of clothing when I am bored with it.	20. Me deshago de la ropa cuando me aburro de ella.
21. I usually discard clothing when it doesn't fit anymore.	21. Desecho la ropa cuando ya no me queda bien.

Given the results of the CFA, the subsequent analyses including the measure of clothing consumption were carried out using the 14-item scale and its four-factor structure. Table 3 shows the descriptive statistics of the scale and the correlations between factors, as well as the overall measure of the construct of clothing consumption.

Table 3. Descriptive statistics and bivariate correlations of clothing consumption factors

	Variables	*M*	*SD*	*α*	1.	2.	3.	4.
1.	CC	4.62	1.65	.85				
2.	Quantity of consumption	4.43	2.04	.80	.88**			
3.	Focus on fashion	4.91	2.34	.77	.81**	.61**		
4.	Focus on quality	4.63	2.16	.77	.64**	.45**	.28**	
5.	Disposal of products	4.49	2.45	.71	.50**	.30**	.24**	.21**

Note. **p < .01 (bilateral). CC, clothing consumption.

4.2. Validation and factor structure of the clothing style confidence scale

This subsection aims to address the second objective of this research: the adaptation of the clothing style confidence Scale (CSC) for use with a Spanish-speaking population. For this, the factor structure originally proposed by Joyner-Armstrong et al. (2018) was tested using confirmatory factor analysis (CFA).

The initial 5-factor model presented an acceptable model fit with values CMIN/DF = 3.714; CFI = .942 y RMSEA = .074. After checking for covariance-related modification indices (M.I.), intrafactor errors with M.I. greater than 10.0 were correlated (Byrne, 2016). This was done between items 12 and 13, 14 and 15, 19 and 20. The goodness of fit of the model improved with values CMIN/DF = 2.892; CFI = .960 y RMSEA = .062. No further modifications to the structure of the scale as proposed by the authors was necessary.

Figure 3 shows the factor structure of the Spanish adaptation of the clothing style confidence scale (CSC).

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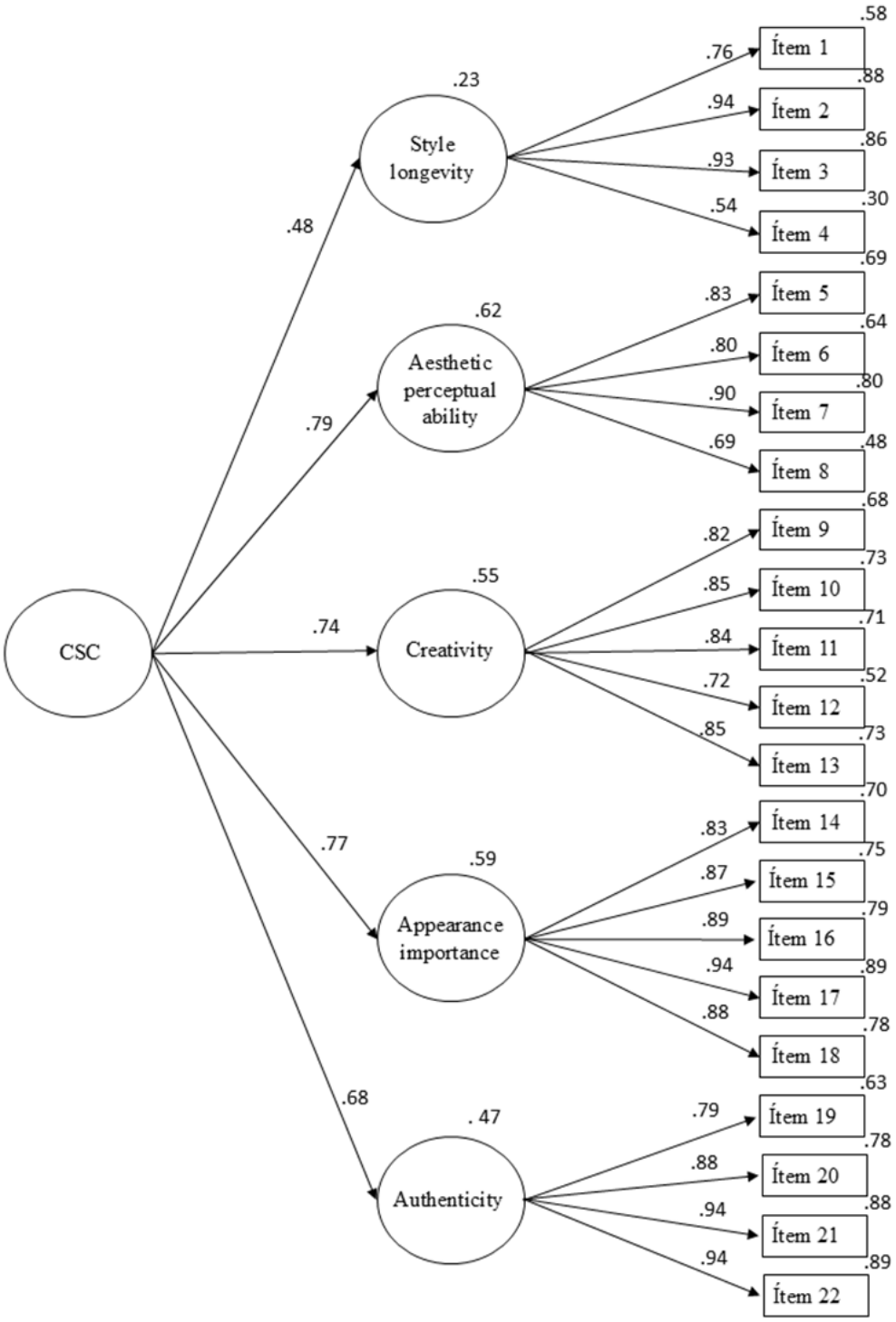
Figure 3. Factor structure of the Spanish adaptation of the clothing style confidence scale.



Note: Errors associated with the variables are not included in the model. CSC, clothing style confidence.

The descriptive analyses and the correlation between the factors and the unidimensional measure of the construct of clothing style confidence are presented in Table 4.

Table 4. Descriptive statistics and bivariate correlations of clothing style confidence factors.

Variables	*M*	*SD*	*α*	1.	2.	3.	4.	5.
1. CSC	6.61	1.69	.94					
2. Style longevity	7.52	1.96	.86	.58**				
3. Aesthetic perceptual ability	7.18	2.10	.88	.78**	.41**			
4. Creativity	5.39	2.43	.92	.78**	.27**	.57**		
5. Appearance importance	7.06	2.22	.95	.81**	.33**	.54**	.50**	
6. Authenticity	6.09	2.46	.94	.77**	.36**	.44**	.46**	.59**

Note. **p < .01 (bilateral). CSC, clothing style confidence.

4.3. Analysis of the influence of clothing style confidence on clothing consumption

First, Pearson correlation analysis was performed to explore the relationship between the components of clothing style confidence -CSC and the clothing consumption dimensions -CC- (see Table 5).

The factors comprising clothing style confidence correlated significantly and positively with the CC in all cases, except between style longevity and quantity of clothing consumption.

Table 5. Bivariate correlations between clothing style confidence and clothing consumption factors

Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Clothing consumption (CC)										
2. Quantity of consumption	.88**									
3. Focus on fashion	.81**	.61**								
4. Focus on quality	.64**	.45**	.28**							
5. Disposal of products	.50**	.30**	.24**	.21**						
6. Clothing style confidence (CSC)	.53**	.43**	.45**	.37**	.28**					
7. Style longevity	.17**	.05	.11*	.27**	.12**	.58**				
8. Aesthetic perceptual ability	.39**	.33**	.30**	.26**	.23**	.78**	.41**			
9. Creativity	.45**	.38**	.41**	.25**	.21**	.78**	.27**	.57**		
10. Appearance importance	.52**	.42**	.47**	.34**	.21**	.81**	.33**	.54**	.50**	
11. Authenticity	.40**	.34**	.31**	.26**	.25**	.77**	.36**	.44**	.46**	.59**

Note. *p < .05. **p < .01 (bilateral).

The influence of the CSC factors on CC were then analyzed using structural equation modeling. In order to study the influence CSC dimensions had directly on CC and its factors, the

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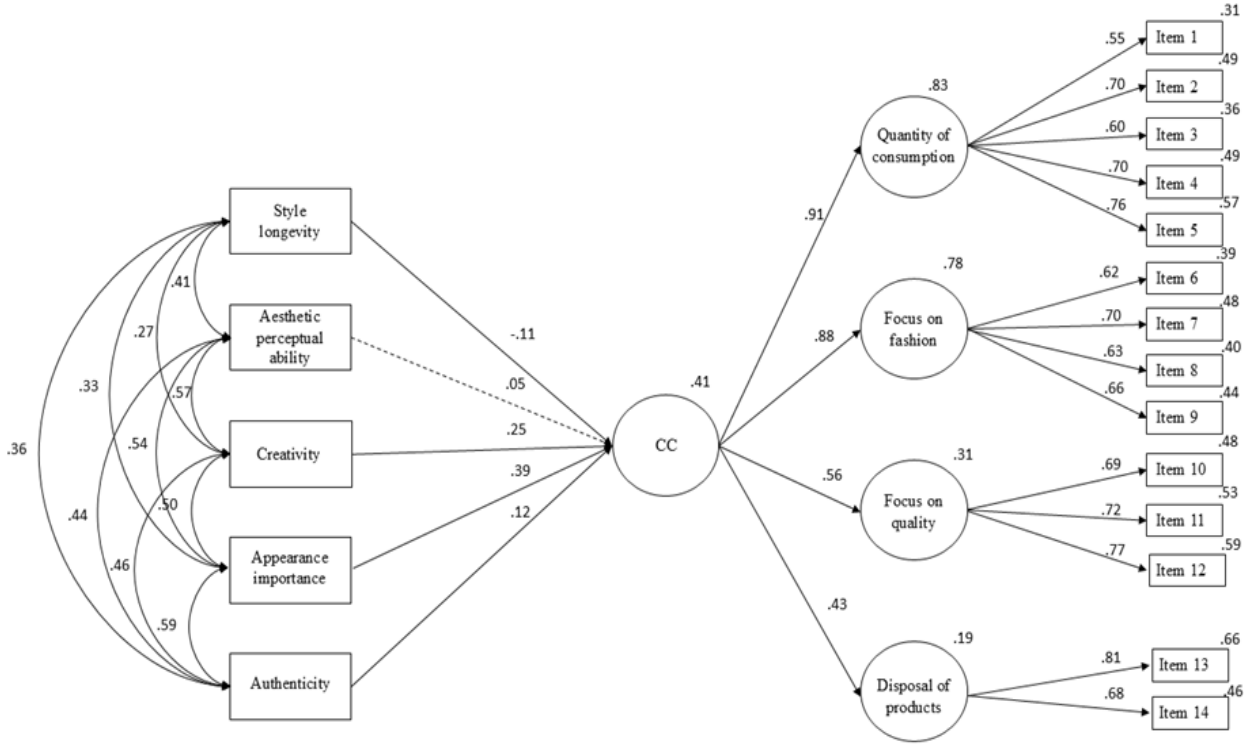
decision was made not to use the global measure of CSC. The analyses were performed directly with the factors style longevity, aesthetic perceptual ability, creativity, appearance importance and authenticity.

In order to control for communalities among the factors of the CSC construct, they were correlated in the model. Acceptable fit indices were obtained (CMIN/DF = 3.413; CFI = .905 y RMSEA = .070), according to the criteria of Hu and Bentler (1999). Figure 4 shows the structural equation model.

Figure 4. Influence of clothing style confidence factors on clothing consumption.



Note: Errors associated with the variables are not included in the model. CC, clothing consumption.

The significance of direct and indirect effects was calculated using the bootstrapping method (Hayes, 2017) with 95% confidence intervals (CI) and 10,000 bootstrap resamples. The model is able to explain 40.9% of the variance in clothing consumption (R^2 = .409, p < .001, 95% CI = [.295, .504]). Table 6 shows the standardized direct and indirect effects of the model.

Table 6. Standardized direct and indirect effects between CSC and CC

Effects	*β*	95% CI
CSC Style longevity		
→ CC	-.11*	[-.208, -.001]
→ Quantity of consumption (indirect)	-.10*	[-.197, -.001]
→ Focus on fashion (indirect)	-.09*	[-.180, -.001]
→ Focus on quality (indirect)	-.06*	[-.115, -.003]
→ Disposal of products (indirect)	-.05*	[-.096, -.003]

Effects	β	95% CI
CSC Aesthetic perceptual ability		
→ CC	.05	[-.066, .170]
→ Quantity of consumption (indirect)	.05	[-.060, .156]
→ Focus on fashion (indirect)	.05	[-.058, .149]
→ Focus on quality (indirect)	.03	[-.035, .096]
→ Disposal of products (indirect)	.02	[-.025, .079]
CSC Creativity		
→ CC	.25***	[.134, .364]
→ Quantity of consumption (indirect)	.23***	[.120, .334]
→ Focus on fashion (indirect)	.22***	[.118, .327]
→ Focus on quality (indirect)	.14***	[.073, .214]
→ Disposal of products (indirect)	.11***	[.058, .170]
CSC Appearance importance		
→ CC	.39***	[.261, .512]
→ Quantity of consumption (indirect)	.36***	[.246, .458]
→ Focus on fashion (indirect)	.34***	[.220, .468]
→ Focus on quality (indirect)	.22***	[.143, .300]
→ Disposal of products (indirect)	.17***	[.108, .246]
CSC Authenticity		
→ CC	.12*	[.004, .232]
→ Quantity of consumption (indirect)	.11*	[.004, .215]
→ Focus on fashion (indirect)	.11*	[.003, .203]
→ Focus on quality (indirect)	.07*	[.003, .135]
→ Disposal of products (indirect)	.05*	[.003, .113]
CC		
→ Quantity of consumption	.91***	[.826, .991]
→ Focus on fashion	.88***	[.791, .958]
→ Focus on quality	.56***	[.449, .660]
→ Disposal of products	.43***	[.310, .550]

Note. *p < .05. **p < .01. ***p < .001. CSC, clothing style confidence. CC, clothing consumption.

We analyzed the direct effect each dimension of CSC had on CC. Creativity and appearance importance positively and moderately influenced CC (β = .25 and .39). In contrast, style longevity had a small but significant negative effect (β = –.11). Indirect effects showed that creativity and appearance importance also influenced CC dimensions, especially quantity of consumption and focus on fashion (creativity: β = .23 and .22; appearance importance: β = .36 and .34).

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4.4. Influence on clothing consumption of consumer identities, environmental self-identity, frugal behavior and clothing style confidence.

This subsection aims to address the third objective of this investigation: to test the explanatory model of clothing consumption based on consumer identities, environmental self-identity, clothing style confidence, and frugal behavior. First, Pearson correlation analysis was performed to explore the relationship between the variables of interest. Table 7 shows the descriptive statistics and correlations between the variables assessed.

Most of the correlations were significant; however, this was not the case between wasteful consumer identity and frugal behavior, environmental self-identity and style longevity; between frugal behavior and the global measure of CC, and the factors of focus on fashion and disposal of products. Nor between environmental self-identity and the global CC measure, and the factors of quantity of consumption, focus on fashion and disposal of products. Although there was no significant correlation between frugal behavior and CC, and between environmental self-identity and CC, the decision was made to keep these two variables in the model to test whether they exert any indirect influence on the dimensions of CC and to analyze their relationship with the other variables.

Table 7. Descriptive statistics and bivariate correlations of the variables included in the model tested

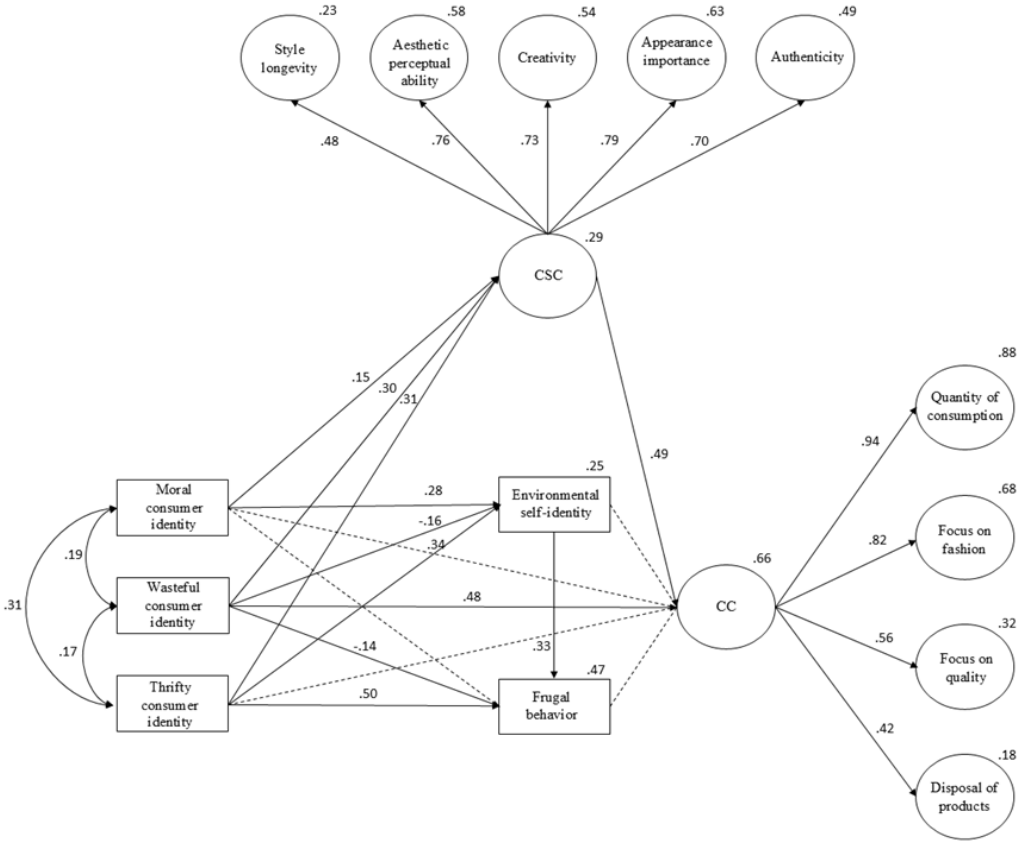
	Variables	*M*	*SD*	α	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
1.	Moral consumer identity	5.29	2.05	.74															
2.	Wasteful consumer identity	4.34	1.94	.75	.19**														
3.	Thrifty consumer identity	7.13	1.52	.60	.31**	.17**													
4.	Frugal behavior	7.57	1.69	.92	.22**	-.08	.60**												
5.	Environmental self- identity	7.58	1.97	.92	.36**	-.04	.41**	.52**											
6.	CC	4.62	1.65	.85	.21**	.59**	.23**	.01	.01										
7.	Quantity of consumption	4.43	2.04	.80	.13**	.57**	.13**	-.09*	-.07	.88**									
8.	Focus on fashion	4.91	2.34	.77	.11*	.50**	.22**	.04	-.01	.81**	.61**								
9.	Focus on quality	4.63	2.16	.77	.27**	.31**	.19**	.10*	.10*	.64**	.45**	.28**							
10.	Disposal of products	4.49	2.45	.71	.18**	.22**	.14**	.02	.07	.50**	.30**	.24**	.21**						
11.	CSC	6.61	1.69	.94	.30**	.33**	.38**	.27**	.21**	.53**	.43**	.45**	.37**	.28**					
12.	Style longevity	7.52	1.96	.86	.24**	.02	.41**	.42**	.25**	.17**	.05	.11*	.27**	.12**	.58**				

Variables	*M*	*SD*	α	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
13. Aesthetic perceptual ability	7.18	2.10	.88	.20**	.18**	.31**	.19**	.14**	.39**	.33**	.30**	.26**	.23**	.78**	.41**			
14. Creativity	5.39	2.43	.92	.34**	.31**	.21**	.11*	.12**	.45**	.38**	.41**	.25**	.21**	.78**	.27**	.57**		
15. Appearance importance	7.06	2.22	.95	.14**	.37**	.32**	.22**	.17**	.52**	.42**	.47**	.34**	.21**	.81**	.33**	.54**	.50**	
16. Authenticity	6.09	2.46	.94	.18**	.29**	.24**	.15**	.14**	.40**	.34**	.31**	.26**	.25**	.77**	.36**	.44**	.46**	.59**

Note. *p < .05. **p < .01 (bilateral). CC, clothing consumption. CSC, clothing style confidence.

Following this, structural equation analysis was carried out in order to explain the variability of CC based on the other variables of interest. Specifically, the direct influence of consumer identities on CC and the mediating effect of environmental self-identity, frugal behavior and CSC. The role of the three consumer identities on CC was also assessed. However, in order to control for communalities among the consumer identity factors, they were correlated in the model. The model obtained acceptable fit indices (CMIN/DF = 2.472; CFI = .918 y RMSEA = .054), according to the criteria of Hu and Bentler (1999). Figure 5 shows the resulting model.

Figure 5. Explanatory model of clothing consumption based on consumer identities, clothing style confidence, environmental self-identity and frugal behavior



Note: The model does not include the errors associated with the variables. CSC, clothing style confidence. CC, clothing consumption.

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Direct and indirect effects were calculated using the bootstrapping method (Hayes, 2017) with 95% confidence intervals (CI) and 10,000 bootstrap resamples. The model is able to explain 66.4% of the variance in clothing consumption (R^2 = .664, p < .01, 95% CI = [.542, .752]), 47.1% of the variance in frugal behavior (R^2 = .471, p < .01, 95% CI = [.373, .558]), 24.8% of the variance of environmental self-identity (R^2 = .248, p < .01, 95% CI = [.166, .330]) and 28.6% of clothing style confidence (R^2 = .286, p < .01, 95% CI = [.154, .415]).

There was no significant direct effect between frugal behavior and CC or indirect effect on CC factors. Thrifty consumer identity had a significant direct effect on frugal behavior (β = .496, p < .01, 95% CI = [.405, .572]) and indirectly through environmental self-identity (β = .112, p < .001, 95% CI = [.068, .170]). Wasteful consumer identity also had a significant direct effect on frugal behavior, in this case a negative effect (β = -.139, p < .01, 95% CI = [-.214, -.064]) and an indirect effect through environmental self-identity, albeit with a small effect size (β = -.051, p < .001, 95% CI = [-.090, -.024]). The direct effect of moral consumer identity on frugal behavior was not significant, but the indirect effect through environmental self-identity was, again with a small effect size (β = .092, p < .001, 95% CI = [.060, .132]). Environmental self-identity had a significant direct effect on frugal behavior (β = .326, p < .001, 95% CI = [.234, .422]), furthermore it exerts a mediating effect on the relationship between the different consumer identities and frugal behavior, partially mediating on the thrifty consumer identity by increasing its effect, partially mediating on the wasteful consumer identity by decreasing its negative influence, and completely mediating on the moral consumer identity so that it becomes significant. Environmental self-identity had no significant direct effect on CC, thus exerting no mediating effect on it. In contrast, it did have a significant indirect effect on the factors disposal of products (β = -.038, p < .05, 95% CI = [-.093, -.001]) and focus on quality (β = -.051, p < .05, 95% CI = [-.117, -.002]), however, the effect sizes were irrelevant.

The moral consumer identity had a significant direct effect on environmental self-identity (β = .282, p < .01, 95% CI = [.172, .368]), as did the wasteful consumer identity (β = -.156, p < .01, 95% CI = [-.244, -.067]) and thrifty consumer identity (β = .344, p < .01, 95% CI = [.234, .462]). All consumer identities had a significant direct effect on CSC. Table 8 shows the standardized direct and indirect effects of consumer identities, CSC and CC and their respective factors.

Table 8. Standardized direct and indirect effects of CSC, CC, consumer identities, environmental self-identity and frugal behavior

	β	95% CI
Moral consumer identity		
→ CSC	.15*	[.041, .252]
→ CSC Style longevity (indirect)	.07*	[.020, .126]
→ CSC Aesthetic perceptual ability (indirect)	.11*	[.034, .194]
→ CSC Creativity (indirect)	.11*	[.032, .194]
→ CSC Appearance importance (indirect)	.12*	[.033, .197]
→ CSC Authenticity (indirect)	.10*	[.030, .177]
→ Frugal behavior	-.30	[-.114, .042]
→ Frugal behavior (indirect)	.09***	[.060, .132]

	β	95% CI
→ Environmental self-identity	.28**	[.172, .368]
→ CC	.00	[-.085, .106]
→ CC (indirect)	.05	[-.012, .116]
→ Quantity of consumption (indirect)	.05	[-.048, .150]
→ Focus on fashion (indirect)	.05	[-.044, .129]
→ Focus on quality (indirect)	.03	[-.026, .100]
→ Disposal of products (indirect)	.02	[-.020, .076]
Wasteful consumer identity		
→ CSC	.30**	[.166, .405]
→ CSC Style longevity (indirect)	.14**	[.092, .202]
→ CSC Aesthetic perceptual ability (indirect)	.23**	[.139, .308]
→ CSC Creativity (indirect)	.22**	[.126, .302]
→ CSC Appearance importance (indirect)	.24**	[.134, .333]
→ CSC Authenticity (indirect)	.21**	[.112, .290]
→ Frugal behavior	-.14**	[-.214, -.064]
→ Frugal behavior (indirect)	-.05***	[-.090, -.024]
→ Environmental self-identity	-.16**	[-.244, -.067]
→ CC	.48**	[.374, .570]
→ CC (indirect)	.18**	[.107, .252]
→ Quantity of consumption (indirect)	.62**	[.542, .687]
→ Focus on fashion (indirect)	.54**	[.460, .615]
→ Focus on quality (indirect)	.37**	[.298, .448]
→ Disposal of products (indirect)	.28**	[.196, .363]
Thrifty consumer identity		
→ CSC	.31**	[.185, .424]
→ CSC Style longevity (indirect)	.15**	[.075, .236]
→ CSC Aesthetic perceptual ability (indirect)	.24**	[.139, .336]
→ CSC Creativity (indirect)	.23**	[.140, .310]
→ CSC Appearance importance (indirect)	.25**	[.145, .342]
→ CSC Authenticity (indirect)	.22**	[.132, .302]
→ Frugal behavior	.50**	[.405, .572]

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	β	**95% CI**
→ Frugal behavior (indirect)	.11***	[.068, .170]
→ Environmental self-identity	.34**	[.234, .462]
→ CC	.01	[-.097, .117]
→ CC (indirect)	.07	[-.033, .176]
→ Quantity of consumption (indirect)	.08	[-.022, .160]
→ Focus on fashion (indirect)	.07	[-.018, .145]
→ Focus on quality (indirect)	.05	[-.011, .100]
→ Disposal of products (indirect)	.04	[-.008, .080]
Environmental self-identity		
→ CC	-.06	[-.162, .035]
→ CC (indirect)	-.04	[-.084, .001]
→ Frugal behavior	.33***	[.234, .422]
Frugal behavior		
→ CC	-.11	[-.233, .008]
CSC		
→ CC	.49**	[.370, .596]
→ Quantity of consumption (indirect)	.46**	[.349, .562]
→ Focus on fashion (indirect)	.41**	[.286, .493]
→ Focus on quality (indirect)	.28**	[.201, .367]
→ Disposal of products (indirect)	.21**	[.134, .292]

Note. *p < .05. **p < .01. ***p < .001. CC, clothing consumption. CSC, clothing style confidence.

As for the influence of consumer identities on CC, the moral and thrifty consumer identities had no significant direct or indirect effects.

In contrast, the influence of wasteful consumer identity was important: its direct effect on CC was significant (β = .482, p < .01, 95% CI = [.374, .570]), and its indirect effect on CC acting through CSC was also significant (β = .177, p < .01, 95% CI = [.170, .252]). Equally significant is the indirect effect of wasteful consumer identity on all CC factors, but especially on the factors of quantity of consumption (β = .619, p < .01, 95% CI = [.542, .687]) and focus on fashion (β =. 541, p < .01, 95% CI = [.460, .615]).

Clothing style confidence had a significant direct effect on CC (β = .493, p < .01, 95% CI = [.370, .596]) and indirect and significant effect on all factors of clothing consumption, especially on quantity of consumption (β = .463, p < .01, 95% CI = [.349, .562]) and focus on fashion (β = .405, p < .01, 95% CI = [.286, .493]).

This model analyzed the effect of the study variables on clothing consumption. The first hypothesis proposed that frugal behavior mediates the relationship between consumer

identities and clothing consumption. However, since no significant effect was found between frugal behavior and clothing consumption or its factors, Hypothesis 1 is rejected.

The second hypothesis stated that environmental self-identity mediates the relationship between consumer identities and clothing consumption. However, environmental self-identity had no significant direct effect on clothing consumption, thus exerting no mediating effect and leading to the rejection of Hypothesis 2.

Hypothesis 3a proposed a positive relationship between environmental self-identity and moral and thrifty consumer identities. Hypothesis 3b posited a negative relationship between environmental self-identity and wasteful consumer identities. Structural equation modeling showed a significant positive direct effect of moral consumer identity on environmental self-identity (β = .28), a significant positive effect of thrifty consumer identity (β = .34), and a significant negative effect of wasteful consumer identity on environmental self-identity (β = –.16), confirming Hypotheses 3a and 3b.

Hypothesis 4 suggested that clothing style confidence significantly mediates the relationship between consumer identities and clothing consumption. CSC exerts a mediating effect on the relationship between wasteful consumer identity and clothing consumption, increasing its effect. This partially confirms Hypothesis 4.

Finally, Hypothesis 5 proposed a direct and positive relationship between consumer identities and clothing style confidence. The thrifty, wasteful, and moral consumer identities positively influenced CSC and its individual factors, supporting Hypothesis 5.

5. Discussion

Clothing-related behaviors, such as the type and quantity of clothing purchased, preferred styles, and patterns of use, hold particular psychological and social relevance. The clothes we wear, whether daily or on special occasions, are closely tied to self-concept. Clothing serves as an expression of the self: we dress not only according to who we are but also who we aspire to be. Our choices in clothing convey desires, attitudes, and values. At the same time, clothing is a key element in how others perceive and evaluate us. As such, clothing and style are socially and culturally contextualized, reflecting norms, preferences, and values. They represent a fundamental dimension of both personal and social identity.

Given that clothing choices are directly linked to identity and serve as a vehicle for expressing the self, it is relevant to examine how identities, particularly those related to pro-environmental consumption, shape clothing consumption. A considerable body of literature has demonstrated the influence of identity on pro-environmental behavior. Notably, the concept of environmental self-identity has been shown to significantly affect a range of individual and group behaviors (e.g., Van der Werff & Steg, 2016; Van der Werff et al., 2013a; 2013b). Similarly, though with less empirical consistency, consumer-specific identities have been explored as predictors of consumption behavior (Gatersleben et al., 2019). From this perspective, it is pertinent to ask what role environmental and consumer identities play in shaping clothing consumption, especially when such consumption is framed in terms of sustainability.

Academic literature frequently frames sustainable consumption as a set of behaviors grounded in psychological processes such as ethical awareness, personal responsibility, and social norms (e.g., Bitane, 2019; Leckie et al., 2021). Sustainable consumption is often equated with ethical, responsible, or conscious consumption. Under this framework, one might expect that identities rooted in moral convictions, such as viewing oneself as environmentally responsible or frugal, would strongly influence consumption choices. That is, individuals who

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identify with these values would presumably adjust their purchasing behavior to align with their self-image. Given the strong connection between clothing and self-identity, it would be logical to expect that morally grounded or responsibility-oriented identities would significantly influence clothing consumption and act as constraints on excessive or impulsive consumption.

However, the findings of this study challenge that assumption. The data show a significant positive relationship between clothing consumption and the wasteful consumer identity, while no such influences were found for moral consumer identity or frugal behavior. Similarly, one might have expected that a strong environmental self-identity would dampen unsustainable consumption impulses. Yet the results indicate otherwise: environmental self-identity does not mitigate the influence of wasteful consumer identity on clothing consumption. In fact, wasteful consumer identity appears to be a robust driver of clothing consumption, independent of any environmental concern expressed in one's self-concept.

These findings point to a strong association between clothing consumption and wastefulness at an identity level. But why is this the case? What is it about clothing that makes it so closely tied to a wasteful consumer identity? A potential explanation can be found in the concept of clothing style confidence (CSC). Previous research (e.g., Joyner Armstrong et al., 2018; Kaiser, 1997; Riggle, 2015) has established that personal style serves as a distinct expression of identity from both individual and social standpoints. If clothing choices reflect not just aesthetic preferences but central elements of the self, it stands to reason that identity characteristics play a central role in fashion consumption. Clothing style confidence, the individual's ability to express themselves through their clothing, might initially be assumed to encourage more deliberate and controlled fashion choices. In theory, individuals with strong style confidence rely less on trends and more on personal authenticity. Because the self is relatively stable, individuals with a high level of CSC might be expected to make consistent, identity-driven clothing choices, potentially resisting excessive consumption. However, the present findings suggest the opposite. Rather than acting as a moderating force, CSC amplifies the effect of wasteful consumer identity. That is, individuals with greater style confidence tend to consume more, not less.

This counterintuitive finding reveals CSC as the single most explanatory factor for clothing consumption among all variables tested. These results align with prior work, such as Evans et al. (2022), who found that individuals with high CSC were more likely to purchase second-hand clothing, but not necessarily to reduce their overall consumption. CSC appears to be more about expressing identity than about limiting consumption.

Consumers use clothing as a mechanism to convey aspects of themselves they see as authentic, valuable, and unique. According to Zaman et al. (2019), conscious clothing style is driven by the desire to communicate the distinctiveness of one's personality through fashion. In essence, people dress not only to reflect who they are but also who they hope to become. This dynamic may help explain why style confidence fuels consumption: the pursuit of self-expression through clothing can lead to a preference for new, trendy, or branded items over more sustainable alternatives.

These findings highlight the need to reassess the role of CSC in sustainable fashion. The data suggests that CSC acts as a consumption driver rather than a deterrent. This may also explain the absence of significant relationships between frugal behavior and CC, as well as why CSC did not mediate the relationship between consumer identities and CC with a stronger pro-environmental focus, such as thrifty and moral identities.

From a pro-environmental perspective, it is important to further explore the connection between consumer identities and environmental self-identity. The findings of this study indicate significant but moderate-to-low positive relationships between environmental self-identity and both moral and thrifty consumer identities. However, while thrifty consumer

identity is strongly linked to frugal behavior, the relationship between moral identity and frugal behavior is negligible. This suggests that moral or ethical motivations have little influence on consumption habits or consumption reduction, whether viewed broadly in terms of frugality or specifically in relation to clothing consumption.

6. Conclusions

The primary aim of this study was to develop a general instrument to measure clothing consumption behavior, addressing the inconsistencies and fragmented evidence in existing literature. With this objective in mind and based on the scale developed by Lang et al. (2013), a 22-item questionnaire was created and later refined to 14 items grouped into four dimensions: quantity of consumption, focus on fashion, focus on quality, and disposal of products. This framework enabled the estimation of an overall clothing consumption behavior score (CC). The results indicate that clothing consumption is a multidimensional construct, with the quantity of clothing purchased emerging as the most significant component. The second most influential factor relates to focus on fashion, behaviors such as browsing for clothing online or in fashion magazines, highlighting that fashion consumption involves not only purchasing but also ongoing engagement and interest in textile products. The other two dimensions, focusing on quality and disposal of products, had lower factor loadings, with the latter contributing the least. In sum, the clothing consumption scale can be understood as both the number of items acquired and the degree to which individuals show interest in and attention to fashion in their daily lives.

The second objective of this research was to adapt and validate the Clothing Style Confidence (CSC) scale by Joyner Armstrong et al. (2018) for use with a Spanish speaking population. Confirmatory factor analysis confirmed a good model fit and validated the scale's five-factor structure: aesthetic perception ability, creativity, appearance importance, authenticity, and style longevity. Although the style longevity factor showed a weaker contribution, the scale overall captures the multifaceted nature of style confidence. This allows for a more nuanced understanding of how different aspects of CSC influence clothing consumption. Specifically, appearance importance and creativity were the strongest predictors: the more importance individuals placed on appearance and the more creative they were with clothing, the higher their clothing consumption.

The third goal was to test an explanatory model of clothing consumption. The findings reveal that clothing consumption is strongly associated with a wasteful consumer identity, while moral and thrifty identities showed no significant impact. Interestingly, contrary to expectations, a strong environmental self-identity did not reduce unsustainable clothing practices; instead, wasteful consumer identity continued to drive consumption, regardless of environmental concern. This suggests that clothing consumption is more closely tied to wastefulness than with principles of sustainability. Another key variable analyzed was clothing style confidence, understood as the individual's perceived ability to express themselves through clothing. While one might assume that greater confidence leads to more deliberate and sustainable purchasing decisions, results indicate the opposite: higher style confidence is associated with increased consumption. Moreover, the effect of wasteful consumer identity on clothing consumption was amplified when clothing style confidence was also present.

This research, however, presents a series of limitations that must be taken into account when evaluating the evidence provided. First, the use of an incidental sample, recruited with the assistance of university students, limits the generalizability of the findings to the broader population. Age-related effects, for instance, may not have been adequately captured. Second,

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the study focused primarily on cognitive variables related to identity in explaining clothing consumption. While consumer and environmental self-identities, along with clothing style confidence, showed strong effects, motivational and affective factors, such as impulsive buying tendencies, were not considered. Additionally, the clothing consumption measure developed in this study did not sufficiently distinguish sustainable or frugal practices (e.g., second-hand purchases, clothing repairs).

Given that the study relied on self-reported consumption behavior, future research should incorporate direct behavioral measures to complement these findings. Further exploration could also examine generational differences in clothing consumption, as well as the influence of online shopping on frugal and sustainable practices. While this research has focused on individual-level factors underlying purchasing decisions, future studies would benefit from incorporating contextual influences, such as real-world fashion campaigns that promote responsible consumption. Additionally, understanding how temporal and seasonal patterns shape sustainable clothing practices could offer valuable insights into facilitating more environmentally responsible behavior.

Author contributions

Conceptualization, D.G-G., G.R-G. and E.S.; Methodology, D.G-G, G.R-G and E.S.; Software, D.G-G, G.R-G and E.S.; Validation, D.G-G, G.R-G and E.S.; Formal Analysis, D.G-G, G.R-G and E.S.; Data Curation, D.G-G, G.R-G and E.S.; Writing - Original Draft Preparation, D.G-G, G.R-G and E.S.; Writing - Review & Editing, D.G-G, G.R-G and E.S. All authors have read and agree with the published version of the manuscript.

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