

## Satisfaction with online clothing shopping: an analysis of its background

### *Satisfacción con la compra de ropa en línea: análisis de sus antecedentes*

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**Received on:** 11/01/24 **Revised on:** 06/02/24 **Approved on:** 20/02/24 **Published on:** 01/04/24

**Abstract:** companies that understand which variables drive customer satisfaction can establish stronger metrics and refine their strategies. Currently, there is an exponential growth in fashion shopping through digital platforms. Our research assesses if fast fashion and slow fashion orientation, environmental awareness, and product, emotional, and website experiences have an effect on satisfaction with online shopping. Moreover, the importance and performance of experiences on satisfaction is analyzed. Statistical techniques used are a structural equation model based on partial least squares and an importance-performance matrix. The research design was quantitative, explanatory, and cross-sectional, conducted in the northern border of Mexico and applied to 539 clothing shoppers on web platforms or digital applications. The results show that only the slow fashion orientation influences environmental awareness, unlike the fast fashion orientation that does not have an effect on it, environmental awareness has a positive impact on the three types of experience, and they favorably impact satisfaction with the purchase of clothing online. The importance-performance matrix revealed that the website/app experience is the most relevant factor for online satisfaction. In conclusion, satisfaction with online shopping is highly dependent on the website experience.

**Keywords:** satisfaction, fashion, awareness, environment, sustainability, experience, online, customer.

**Resumen:** cuando las empresas comprenden las variables que impulsan la satisfacción de los clientes, pueden establecer mejores puntos de referencia y perfeccionar sus estrategias. En la actualidad, existe un crecimiento exponencial de las compras de ropa de moda a través de plataformas digitales. Esta investigación evalúa si la orientación a la moda rápida y a la moda lenta, la conciencia ambiental y las experiencias del producto, emocional y con el sitio web inciden sobre la satisfacción con la compra en línea. Además, se analiza la importancia y el rendimiento de las experiencias sobre la satisfacción. Las técnicas estadísticas utilizadas son un modelo de ecuaciones estructurales basados en mínimos cuadrados parciales y una matriz de importancia-desempeño. El diseño de investigación fue cuantitativo, explicativo y transversal, desarrollado en la frontera norte de México y aplicado a 539 compradores de ropa en plataformas web o aplicaciones digitales. Los resultados evidencian que solo la orientación a la moda lenta influye sobre la conciencia ambiental, a diferencia de la orientación a la moda rápida que no tiene efecto en ella, la conciencia ambiental tiene un impacto positivo sobre los tres tipos de experiencia y éstos inciden favorablemente sobre la satisfacción con la compra de ropa en línea. La matriz importancia-desempeño evidenció que la experiencia con el sitio web/app es el factor más relevante para la satisfacción en línea. En conclusión, la satisfacción con la compra en línea depende en gran medida de la experiencia con el sitio web.

**Palabras clave:** satisfacción, moda, conciencia, sostenibilidad, medioambiente, experiencia, online, cliente.

**Suggested citation:** Cavazos-Arroyo, J., Máynez-Guaderrama, A. and Vargas-Salgado, M. M. (2024). Satisfaction with online clothing shopping: an analysis of its antecedents. *Retos Revista de Ciencias de la Administración y Economía*, 14(27), 35-50. <https://doi.org/10.17163/ret.n27.2024.03>



## Introduction

Online shopping has maintained sustained growth because it represents a cheaper and more convenient procurement method compared to traditional purchases (Vasić *et al.*, 2019). In addition, this new format revolutionized the way we purchase products, as they allow customers to buy at any time and from anywhere (Ellison *et al.*, 2021), place orders, pay with digital means and receive what they have bought where they want (Rita *et al.*, 2019). Therefore, aspects such as customer experience and satisfaction with online shopping are crucial for organizations, although they are seen as a challenge for e-commerce (Mamakou *et al.*, 2023; Rita *et al.*, 2019).

Previous work indicates that when the variables that drive customer satisfaction are understood, companies can establish better benchmarks and refine their strategies (Mofokeng, 2021; Vasic *et al.*, 2019). An example of this is found in the fashion industry. In this sector, there is an exponential growth in purchases through digital platforms and shopping experiences and consumer satisfaction are recognized as fundamental factors for the value proposition (Kautish *et al.*, 2022). However, there are challenges for fashion clothing brands selling online, especially in relation to issues such as social and ecological responsibility and the need to ensure that customers are satisfied (Gutiérrez Rodríguez *et al.*, 2020). Therefore, this research work has two objectives. The first is to evaluate a structural model of satisfaction with online shopping, which includes as background the orientation to fast and slow fashion, environmental awareness and product, emotional and website experiences. The second purpose is to analyze the importance and performance of the three types of experience on online shopping satisfaction, using an importance-performance matrix. In addition to the introduction, the article includes five more sections: literature review, method, results, discussion and conclusions.

### Satisfaction with online shopping

Customer satisfaction with online shopping (e-satisfaction) can be defined as the customer's assessment of their experience of the service received

when they made a commercial transaction through electronic platforms or applications (Gutiérrez Rodríguez *et al.*, 2020; Miao *et al.*, 2022). Generally, the evaluation of customer satisfaction in the e-commerce environment is associated with aspects of the website such as ease of use, reliability and privacy and, once the purchase is made, other factors such as delivery times and even security become relevant (Mofokeng, 2021; Trivedi and Yadav, 2020). As a one-dimensional construct, general satisfaction with the seller is usually evaluated, as well as post-purchase affective and cognitive evaluations (Fuentes-Blasco *et al.*, 2017).

Among the main differences between traditional retail and online retail is the lack of physical and human interaction that normally takes place in traditional stores (Yeh *et al.*, 2022). In the context of the fashion industry, customer satisfaction is frequently related to the quality and service associated with the shopping experience (Wang *et al.*, 2019), as well as the reflection of feelings and emotions derived from post-purchase consumption (Cuesta-Valiño *et al.*, 2022).

### Fashion orientations and environmental awareness

Fashion orientation is understood as a trait or a personal predisposition towards fashion that influences consumer perceptions and purchasing behavior (Michon *et al.*, 2015). In this research, two particular traits of fashion clothing consumers are studied: the orientation to fast fashion and the orientation to slow fashion. The focus on fast fashion clothing refers to the willingness of consumers to buy clothes from the latest trends from sellers that offer relatively affordable prices and renew their offer with novelties and variety in a few weeks, instead of doing it seasonally (Joung, 2014). On the other hand, the slow fashion consumer values the place where the garment is produced, if it comes from a fair trade, and if it is produced in a sustainable way; this type of consumer worries about buying items less driven by fashion trends, also seeks to use them for longer and worries about the impact of the fashion industry on workers and society (Domingos *et al.*, 2022).

Environmental awareness is understood as the degree of knowledge, information and sensitivity

of people to environmental problems and their concern to solve them (Zameer and Yasmeen, 2022). For their part, the environmental awareness of fashion clothing consumers refers to their level of concern about the damages associated with the use of chemicals and the waste of products not consumed in this industry (Domingos *et al.*, 2022), as well as their effect on pollution and climate change (Şener *et al.*, 2022). It should be noted that unfortunately levels of environmental pollution are higher in developed countries than in underdeveloped ones (Kumar *et al.*, 2021). In the academic field, it is still necessary to explore how the movements of fast and slow fashion influence variables such as environmental awareness (Santos Saraiva, 2023). Previous work argues that in the fashion industry there is a paradox in which the insatiable desire of fast fashion negatively affects variables associated with sustainability, responsibility and environmental concern and, on the contrary, the orientation to slow fashion does so in a positive way (Brewer, 2019; Rathinamoorthy, 2019). It is therefore proposed that:

H1a: Fast fashion orientation negatively influences environmental awareness in the fashion industry.

H1b: Slow fashion orientation positively influences environmental awareness in the fashion industry.

## Environmental awareness and online shopping experience

The importance given to the customer experience originates from the hedonic vision of consumption, which addresses the sensory and affective gratification associated with the use of a product or service (Artusi *et al.*, 2020). The shopping experience is defined as a personal and subjective response that involves the client from a set of interactions with a product or service, a company or part of an organization, that provokes an emotional, rational, sensory, physical and/or spiritual reaction (Bascur and Rusu, 2020). It is a multidimensional construct that can involve the website, the product(s), the service, the brand and even the emotion involved in the purchase (Yin & Xu, 2021). It has been identified that the experiences of consumers, both fast and slow

fashion, differ, so more work has been called on to predict the behavior of both types of consumers (Yoon *et al.*, 2020). This research delves into three dimensions of the experience: with the product, the website and the emotional aspect.

Experience with fast or slow fashion clothing includes aspects such as quality, price, product type, packaging quality, and the feeling of wearing it (Yin and Xu, 2021). In a study conducted in Bangladesh associated with the procurement of green products, it was found that a consumer's concern to protect the environment can impact aspects such as environmental responsibility and experience with green products (Hossain, 2022). On the other hand, an important dimension of the construction of experiences are emotions (Silva *et al.*, 2021). Emotional experience in the fashion clothing industry refers to the emotions that customers experience during the buying process, i.e., when they search, decide, acquire, receive and wear the clothes (Yin and Xu, 2021). In other fields of research, such as rural tourism, it has been found that a high level of environmental awareness among tourists in China can affect their emotional experience with the product or service received (Xiaohong, 2019). Also, in pro-social studies carried out in Spain it was identified that consumers with a tendency towards environmentally responsible behavior experience intrinsic warm emotional sensations [warm glow] (Hartmann and Apaolaza-Ibáñez, 2012).

Finally, it has been identified that a relevant topic for fashion clothing customers is the experience on the website (Boardman and Chrimes, 2023; Li *et al.*, 2023). This refers to the assessment made by users on the attributes of a website that meet their needs and reflect its overall excellence (Aladwani and Palvia, 2002). For example, Li *et al.* (2023) analyzed the online adaptive clothing shopping experience through Amazon, finding that functional aspects associated with ease of browsing and value of experience are important components for customers during online shopping. However, previous work has not empirically proven the existence of an effect of environmental awareness on the website's experience in purchasing clothes, so this work explores the possibility of a positive effect. This proposal is

based on the fact that environmental awareness among consumers can increase the preference for shopping on websites, since this practice: reduces environmental damage by reducing car travel (which consequently reduces the emission of greenhouse gases); limits inventories, as well as waste and retail space – which decreases energy costs for lighting and air conditioning –; and optimizes the supply chain, from production to delivery or return (Tokar *et al.*, 2021). It is proposed that:

H2a: Environmental awareness of the fashion industry positively influences the product experience.

H2b: Environmental awareness of the fashion industry positively influences the emotional experience.

H2c: Environmental awareness of the fashion industry positively influences the experience with the website.

Satisfaction with online shopping (e-satisfaction) is understood as a feeling of customer pleasure resulting from their shopping experience to a certain e-commerce company, in relation to their expectations and previous shopping experiences (García-Salirrosas *et al.*, 2022). It has been found that customer experiences are key for their satisfaction. Work carried out in Indonesia (Mustikasari *et al.*, 2021) and China (Pei *et al.*, 2020), in the entertainment, technology and clothing sectors, found that experience with the product influences satisfaction with online shopping. Also, different studies in the fields of online learning (Chen *et al.*, 2023), labor (Lindner *et al.*, 2021), and tourism (Ratnasari *et al.*, 2021) have identified that emotional experience has a positive and significant impact on satisfaction. Finally, there is empirical evidence that indicates that the experience with the website favors consumer satisfaction; such is the case of a work carried out with online retailers of fashion commerce in Spain (Gutiérrez Rodríguez *et al.*, 2020). It is therefore proposed that:

H3a: The product experience positively influences the satisfaction with online shopping.

H3b: Emotional experience positively influences online shopping satisfaction.

H3c: The experience with the website positively influences the satisfaction with the online purchase.

## Materials and method

The research design was quantitative, explanatory and cross-sectional. The subjects were people living on the northern border of Mexico, who participated and answered affirmatively to the following filter questions: do you agree to participate in this research work by answering this questionnaire? do you agree to have your information used anonymously and confidentially for this research? and have you bought clothes on any web platform/online app in the last 6 months? Through a non-probabilistic convenience sampling, 606 responses were received, of which 539 were usable and answered affirmatively the filter questions. To determine the sample size, the recommendation of Hair *et al.* (2019a; 2019b) was taken into consideration, in the sense of identifying the latent variable that receives the most arrows (structural paths). In the model used in this research work, the construct that meets that condition is satisfaction with the online purchase, which receives three arrows. The minimum sample size to identify an  $R^2$  of at least 0.10, with a statistical significance of 1 % and a power of 80 % is 145 (Hair *et al.*, 2019b). Descriptive statistics and exploratory factor analysis were calculated with SPSS software version 24 and for the PLS structural model the SmartPLS software version 4 was used.

Instrument. Adapted scales available in the academic literature were used (see table 1). As it is observed, environmental awareness about the fashion industry was measured with three items of Xu *et al.* (2022) scale; the Fast Fashion Orientation with six items of Gwozdz *et al.* (2015) scale; the Slow Fashion Orientation with Jung (2014) scale, which consists of five dimensions: Equity with three items, Authenticity with three items, Functionality with three items, Localism with three items and Exclusivity with three items. The shopping experience was valued according to Yin and Xu (2021) scale and three dimensions



were considered: Experience with the website/app (5 items), Emotional experience (4 items) and Experience with the product (5 items). Likewise, the Satisfaction with online clothing purchase

scale of Pei *et al.* (2020) with five items was used. All response descriptors were evaluated with a five-point Likert scale ranging from totally disagree = 1 to totally agree = 5.

**Table 1**  
Scales used

Fast fashion orientation	Orientation to slow fashion Equity	Website/app experience
OMR.1. It is important for me to be trendy. OMR.2. I keep my wardrobe/closet updated according to the fashion changes. OMR.3. I consciously select clothes that reflect current fashion. OMR.4. I usually have one or more sets/clothes/models of the latest fashion. OMR.5. I dedicate time and effort to find out about the latest fashion. OMR.6. Having fashionable clothes that I like is very important for me.	Eq1: Fair remuneration for clothing producers is important for me when I buy clothes. Eq2: I am worried about fair trade when I buy clothes. Eq3: I am concerned about the working conditions of the producers when I buy clothes. <b>Functionality</b> F1: I often combine my clothes in different ways. F2: I try to keep my clothes as long as possible, instead of getting rid of them in a short time. F3: I prefer simple and classic designs. <b>Authenticity</b> A1. I like garments made with traditional techniques A2. I think the work of Mexican artisans gives more value to clothes.	To answer the following questions, think about the website/app you use most to buy clothes.  EW1: The design of the website/app is efficient and pleasant  EW2: Browsing, searching and buying on the website/app is simple and easy  EW3: The website/app has the necessary information (size, sizes, materials) and opinions about the products.  EW4: The pictures have good quality and show the features of the products.  EW5: The website/app is fast and stable.
	A3. Handmade clothing has more value than mass-produced clothing. <b>Localism</b> L1: I would rather buy clothes made in Mexico than clothes made abroad. L2: I think clothing made from Mexican materials is more valuable. L3: I think we need to support Mexican clothing brands. <b>Exclusivity</b> E1: I like limited edition clothes. E2: I'm very attracted to eclectic clothes. E3: I enjoy having clothes that others do not have.	
<b>Environmental awareness about the fashion industry</b> CAIM1. I am aware of the level of pollution caused to the environment by the garment industry. CAIM2. I am very concerned about the impact of the garment industry on the environment. CAIM3. I believe that buying second-hand clothes can reduce environmental pollution.	<b>Product Experience</b> EP1: The clothes have good quality EP2: Prices are good EP3: Clothing packaging is good and there is rarely damage EP4: There is a wide variety of clothes EP5: The clothes are nice and comfortable.	<b>Emotional experience</b> EE1: I enjoy shopping on this website/app EE2: Shopping on this website/app can lessen my stress EE3: I often get pleasant surprises when I shop on this website/app EE4: When I dress with products purchased on this website/app, I feel confident(a) about myself(a).

**Satisfaction with buying clothes online**

SCL1. I am satisfied with the purchases I make on the website/app.

SCL2. I am satisfied with the clothes I bought.

SCL3. I am satisfied with the delivery time

SCL4. I am satisfied with the website/app.

SCL5. I am satisfied with the prices of the garments offered by the website/app.

In this type of work there may be a bias of common method. To assess its existence, the single Harman factor and the variance inflation factors (VIF) were reviewed. The first criterion uses an exploratory factor analysis where the unrotated solution in a factor of all instrument items must be less than 50% of the variance (Kock *et al.*, 2021). From the context of PLS-SEM, the bias of the common method is associated with the measurement method, so the analysis of the variance inflation factor (VIF) is used, which if it is greater than 3.3 it indicates collinearity and the model could present bias of the common method (Kock, 2015; Tsai and Bui, 2021). The results showed a single Harman factor of 43.603% which is less than the cut-off point, while all VIF values of the constructs are less than the maximum cut-off point.

## Results and discussion

Characteristics of the participants. Most participants were women (57.9%), followed by men (40.8%) and another gender (1.36%). Regarding the occupation, most were students (60.3%), fo-

llowed by employees (25.2%). The average age was 23.13 years, with a minimum of 13 years and a maximum of 53 years. The most common purchase frequency was between 2 and 3 times a year (31.5%), followed by more than 5 times a year (26.5%), 21.3% reported buying from these sites once a year and 20.6% said buying between 4 and 5 times a year.

Measurement model. First, the value and significance of factor loads, the reliability of the items and the construct, and the convergent validity of the model were reviewed. The items showed factor loads between 0.782 and 0.935, with t-values greater than 1.96 (Table 2). In addition, the items are reliable, since by squaring their factor load value, the minimum cut-off point of 50% was exceeded. In terms of convergent validity, Cronbach's Alpha values ( $\alpha$ ) and compound reliability [rho\_a and rho\_c] are between 0.70 and 0.95 and the extracted variance values [AVE] are greater than 0.50. Out of the 43 items evaluated, five [F1, L3, P1, P5 and W1] were eliminated, since they showed factor load values lower than 0.708 (Hair Jr. *et al.*, 2020).

**Table 2**  
Convergent validity

Construct	Items	Loads	Cronbach Alpha	Compound reliability (rho_a)	Composite reliability (rho_c)	Mean Extracted Variance (AVE)
Authenticity	A1	0.825	0.849	0.849	0.909	0.770
	A2	0.918				
	A3	0.887				
Awareness	CAIM1	0.927	0.909	0.909	0.943	0.846
	CAIM2	0.935				
	CAIM3	0.896				
Fairness	Eq1	0.863	0.844	0.844	0.906	0.763
	Eq2	0.897				
	Eq3	0.860				

Construct	Items	Loads	Cronbach Alpha	Compound reliability (rho_a)	Composite reliability (rho_c)	Mean Extracted Variance (AVE)
Exclusivity	E1	0.876	0.824	0.826	0.895	0.740
	E2	0.797				
	E3	0.912				
	E4	0.890				
Emotional experience	EE1	0.849	0.893	0.911	0.925	0.756
	EE2	0.841				
	EE3	0.889				
Product Experience	EP2	0.907	0.873	0.874	0.922	0.798
	EP3	0.885				
	EP4	0.887				
Website/app experience	EW2	0.927	0.946	0.946	0.961	0.860
	EW3	0.921				
	EW4	0.932				
	EW5	0.930				
Functionality	F2	0.934	0.841	0.844	0.926	0.863
	F3	0.923				
Localism	L1	0.904	0.795	0.798	0.907	0.830
	L2	0.918				
Fast fashion orientation	OMR.1	0.859	0.932	0.939	0.946	0.746
	OMR.2	0.886				
	OMR.3	0.892				
	OMR.4	0.868				
	OMR.5	0.816				
	OMR.6	0.860				
Online shopping satisfaction	SCL1	0.923	0.934	0.944	0.950	0.793
	SCL2	0.916				
	SCL3	0.782				
	SCL4	0.926				
	SCL5	0.896				

The discriminant validity was determined with the heterotrait-monotrait ratio and the maximum cut-off point was 0.85 (Henseler *et al.*, 2015).

The measurement model meets the recommended criterion, as the HTMT ratios are less than the suggested cut-off point (Table 3).

**Table 3**  
Discriminant validity

	Authenticity	Awareness	Fairness	Exclusivity	Emotional experience	Product Experience	Website Experience	Functionality	Localism	Orient. fast fashion
Awareness	0.681									
Fairness	0.664	0.612								
Exclusivity	0.510	0.340	0.463							
Emotional experience	0.438	0.392	0.409	0.456						
Product Experience	0.569	0.549	0.482	0.410	0.860					

	Authenticity	Awareness	Fairness	Exclusivity	Emotional experience	Product Experience	Website Experience	Functionality	Localism	Orient. fast fashion
Website/app experience	0.588	0.600	0.467	0.361	0.695	0.820				
Functionality	0.843	0.654	0.505	0.444	0.420	0.606	0.622			
Location	0.825	0.561	0.573	0.604	0.429	0.474	0.439	0.720		
Fast fashion orientation	0.415	0.373	0.479	0.554	0.466	0.425	0.394	0.301	0.402	
Online shopping satisfaction	0.541	0.461	0.453	0.372	0.743	0.816	0.779	0.537	0.462	0.424

Once the validity of the measurement model was confirmed, the structural model was evaluated. The following indicators were reviewed: VIF of the constructs, path of the proposed relationships,  $R^2$ ,  $f^2$  and  $Q^2$ . Table 4 shows the VIF values of the structural model. As discussed in advance, the recommended criterion is that these are equal to or less than 3.3 (Kock, 2015). In this model, the VIF values are between 1.0 and 3.3. The path coefficients of the model were then revised (see table 4). Out of the eight hypotheses proposed,

only one [orientation to fast fashion environmental awareness about the fashion industry,  $\beta = 0.047$ ,  $t=1.145$ ] was rejected. According to the result of the rest of the hypotheses, the orientation to slow fashion has a positive and significant impact on environmental awareness regarding the fashion industry, and the latter has a positive and significant impact on experiences with the product, the website and emotional aspect, and these three types of experiences favor satisfaction with online shopping.

**Table 4**  
Trajectory coefficients of the structural model

Construct	Items	Loads	Cronbach Alpha	Compound reliability (rho_a)	Composite reliability (rho_c)
Hypothesis	Beta	Average	Standard deviation	Value t	p-value
Environmental awareness of the fashion industry -> Emotional experience	0.360	0.361	0.046	7,787	0.000
Environmental Awareness About Fashion Industry-> Product Experience	0.489	0.490	0.044	11,229	0.000
Environmental awareness about the fashion industry -> Experience website/app	0.557	0.557	0.039	14,445	0.000
Emotional experience -> Satisfaction purchase online	0.237	0.237	0.042	5,606	0.000
Product Experience -> Online Shopping Satisfaction	0.279	0.279	0.054	5,134	0.000
Website Experience -> Online Shopping Satisfaction	0.373	0.372	0.052	7,204	0.000
Slow Fashion Orientation -> Environmental Awareness Regarding Fashion Industry	0.613	0.611	0.042	14,705	0.000
Fast Fashion Orientation -> Environmental Awareness Regarding Fashion Industry	0.047	0.050	0.041	1,145	0.252



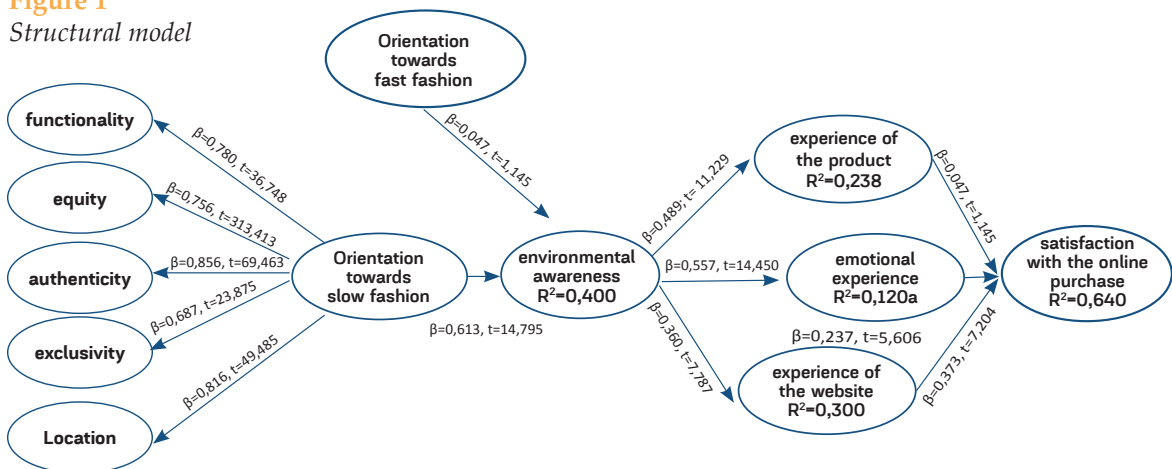
The size of the  $f^2$  effect and the determination coefficients  $R^2$  of the dependent constructs in the model were revised. The criteria for  $f^2$  indicate a small effect between 0.02 and 0.14, a medium effect between 0.15 and 0.35 and large above 0.35 (Hair *et al.*, 2019b). It was identified: no significant effect of rapid fashion orientation on environmental awareness (0.003); small effect of emotional experience (0.061) and product experience (0.066) on online shopping satisfaction; medium effects of environmental awareness on emotional experience (0.149) and product experience (0.315), and experience with the website/app on online shopping satisfaction (0.169); and large effects of slow fashion orientation on environmental awareness (0.479) and experience with the website/app (0.449). Regarding  $R^2$ , values around 0.25 are considered weak, 0.50 moderate, and 0.75 substantial (Hair *et al.*, 2019b). The results show three weak  $R^2$  in emotional experience (0.120), product experience (0.238), and website/app experience (0.300); and two moderate  $R^2$  in environmental awareness (0.400) and online shopping satisfaction (0.640).

Predictive relevance was reviewed with the  $Q^2$  indicator. Values close to a  $Q^2 = 0$  indicate small relevance, around 0.25 means medium relevance, and  $Q^2$  greater than 0.50 means large relevance

(Hair *et al.*, 2019b). The results showed a small relevance in emotional experience (0.172), and median relevance in environmental awareness (0.400), product experience (0.249), experience with the website/app (0.273), and satisfaction with online shopping (0.221). Regarding the indicators of goodness, a model is considered to have a good fit when the standardized mean quadratic residue (SRMR) is less than 0.08 (Al-Marouf *et al.*, 2021), although some researchers accept a limit less than 0.10 (Cangur and Ercan, 2015). The SRMR of this work was 0.08.

Regarding indirect effects, no significant effects were identified from rapid fashion orientation on emotional experience ( $\beta=0.017$ ,  $t=1.100$ ), website/app experience ( $\beta=0.026$ ,  $t=1.127$ ), and product experience ( $\beta=0.023$ ,  $t=1.123$ ), nor from rapid fashion orientation on online shopping satisfaction ( $\beta=0.020$ ,  $t=1.124$ ). Significant indirect effects of slow fashion orientation on emotional experience ( $\beta=0.221$ ,  $t=6.263$ ), product experience ( $\beta=0.300$ ,  $t=7.998$ ), website/app experience ( $\beta=0.341$ ,  $t=9.371$ ), and online shopping satisfaction ( $\beta=0.263$ ,  $t=7.861$ ), and environmental awareness on online shopping satisfaction ( $\beta=0.430$ ,  $t=11.197$ ) were found. The contrasted model is shown in Figure 1.

**Figure 1**  
Structural model



### Model importance-performance analysis map

The results of the structural model were deepened with a map of importance-performance

analysis (MAID), which compares the total effects of the structural model on a specific construct (Hair *et al.*, 2019a). Five steps were developed. First, it was found that: a) the performance scores of the latent variables were in a range between

zero and one hundred; b) the indicators were encoded in the same direction and; c) the external loads of the estimators of the measurement model were positive. Then, we proceeded to examine the scores of the latent variables readjusted. Third, the effects of the latent variables on online shopping

satisfaction were analyzed. It was found that the experience with the website/app is the variable that most explains the satisfaction with the online purchase, followed by the Product Experience and finally the Emotional Experience (table 5).

**Table 5**

*Average of reset latent variables*

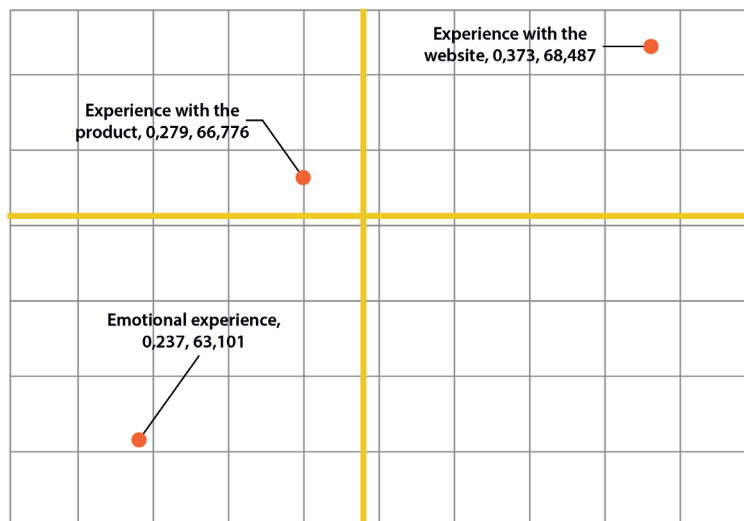
Latent variables	Importance	Performance
Emotional experience	0.237	63,101
Product Experience	0.279	66,776
Website/app experience	0.373	68,487
Average	0.296	66,121

Fourth, the importance-performance map was created. The lower right quadrant was left empty, showing that none of the antecedent variables has high importance and low performance (Figure 2). Then, the upper right quadrant was reviewed, in which the constructs with a high level of importance and performance are located, as well

as the Experience with the website/app. In the lower left quadrant was the emotional experience, with a low level of performance and importance. Finally, in the upper left quadrant was located the Experience with the product with a low importance, but a good performance.

**Figure 2**

*Map importance-adjusted performance of constructs*



As a fifth and final step, the fourth step procedure at the item level was replicated. In the lower right quadrant the indicator with the highest opportunity for improvement is “prices are good” (EP2, importance = 0.104, performance =

64.610), followed by “clothing packaging is good and it is rarely damaged” (EP3, importance = 0.101, performance = 64.332). Five items are located in the upper right quadrant: one for Product Experience and four for Website/App Experience. The

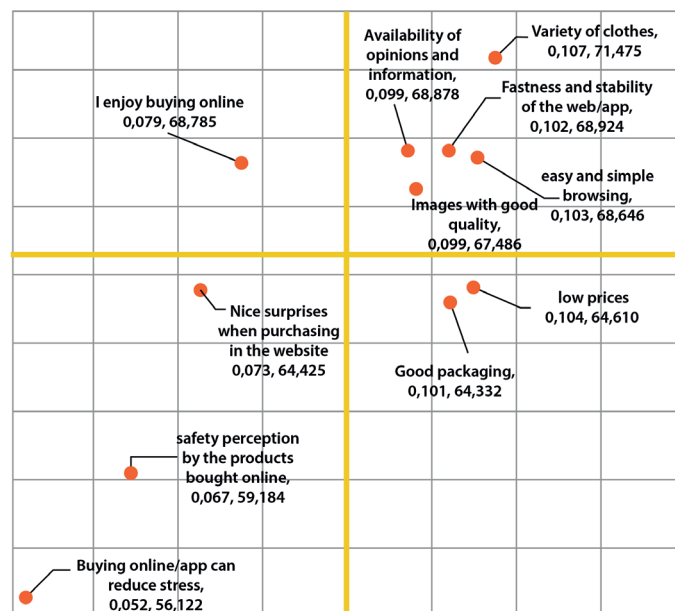
items are “There is a wide variety of clothing” (EP4, importance = 0.107, performance = 71.475), followed by “The website/app is fast and stable” (EW5, importance = 0.102, performance = 68.924), “The website/app has the necessary information (sizes, materials) and opinions about the products” (EW3, importance = 0.099, performance = 68.878), “Browsing, searching and buying on the website/app is simple and easy” (EW2, importance = 0.103, performance = 68.646), finally “The images have good quality and show the characteristics of the products” (EW4, importance = 0.099, performance = 67.486). Figure 3 shows the results.

It is expected that more and more people will choose to buy their clothes on web platforms or digital applications. This research work was carried out on the northern Mexican border and applied to people who bought clothes on some web platform or online application 6 months before the study. The evaluation of the structural model included the orientation to fast fashion and slow fashion, environmental awareness and product, emotional and website experiences.

It was proposed that the orientation to fast fashion and the orientation to slow fashion influence environmental awareness in the fashion industry,

the first negatively and the second positively. Contrary to expectations, only the second relationship (H1b) was validated. Hence, the orientation to fast fashion does not influence environmental awareness as other works have identified (Brewer, 2019; Rathinamoorthy, 2019); however, in the case of consumers with orientation to slow fashion, its positive impact on environmental awareness was corroborated. Environmental awareness about the fashion industry was also considered to positively influence the product experience, emotional experience, and experience with the website. The results confirm all three proposals, as previous work (Hossain, 2022; Xiaohong, 2019). This work contributes to the advancement of knowledge by empirically proving the positive influence of environmental awareness regarding the fashion industry on the experience with the website. Then, it was proposed that the three types of experience positively affect satisfaction with online shopping. The results confirmed such proposals and thus confirmed what was found in previous work (Gutiérrez Rodríguez *et al.*, 2020; Pei *et al.*, 2020; Ratnasari *et al.*, 2021; Zarantonello and Schmitt, 2010).

**Figure 3**  
Matter-adjusted item performance map



On the other hand, the importance and performance of the three types of experience on online shopping satisfaction was analyzed through the importance-performance matrix. The results showed that the experience with the website/app is the most relevant factor to achieve online satisfaction. The second factor was the experience with the product and finally, the least relevant the emotional experience. Regarding the performance, the first two exhibited good levels at the aggregate level, however, at the item level it is necessary to improve both the price and the packaging. The exception at the construct level was located in the emotional experience, which showed a comparatively lower level than the other types of experience. At the item level, there are opportunities for improvement regarding the reduction of stress related with purchases on the website/app, the feeling of security by the use of products purchased on the website/app, and the reception of pleasant surprises when purchasing on the website/app.

## Conclusions

This research evaluated a structural model of satisfaction with online shopping where the orientation to fast fashion and slow fashion, environmental awareness and experiences of the product, emotional aspect and the website were included as background. We also analyzed the importance and performance of the three types of experience on online shopping satisfaction, using an importance-performance matrix.

Although the rapid fashion orientation was expected to decrease environmental awareness, the research findings showed that there is no effect between these variables. The interest of consumers to keep dressed in fashion trends unfortunately comes with indifference to the environmental problems generated by this industry. The impact of the textile and fashion industry on the environment is huge, yet many end consumers still ignore it. Fortunately, slow fashion orientation has a strong positive effect on environmental awareness.

With the increase in online shopping, customer experiences are more complex. In this work,

three types of experience were evaluated: with the product (e.g. price, packaging, and variety), with the emotions (e.g. taste, decreased stress, pleasant surprise), and with the website (navigation, information, opinions, images, speed and stability). Environmental awareness has a positive impact on all three types of experience, but it does so more strongly on the website. This means that consumers of fashionable clothing with greater sensitivity to environmental issues value the shopping experience with the website more than the emotional experience and with the product, specifically with regard to the quality of the images of the products, the speed and stability of the site, the simplicity and ease of browsing, the availability of information about the products, as well as the opinions about them.

Satisfaction with online shopping is explained by the three types of experience, but again it highlights the importance of the experience with the website. Unlike traditional shopping, online shopping involves not only a lack of physical and human interaction, but also the use of technological tools through websites, digital applications and social networks. Since shopping experiences are relevant to the online fashion buyer's satisfaction, organizations should develop strategies to reduce sources of stress throughout the buying and post-buying process, and strive to improve their customers' emotional experiences.

There is evidence that little attention has been paid to understanding the electronic fashion retail sector (Gutiérrez Rodríguez *et al.*, 2020). This research contributes empirical evidence to knowledge in this area. The findings obtained are a call to continue investigating in the subject, particularly in online purchases in other sectors with a sustainable approach, to investigate other dimensions of the shopping experience such as service and brand, and the effect of the experience on other relevant variables such as e-WOM and intention to repurchase. Like other works, this also presents some limitations since a non-probabilistic sampling was used, with a transversal design, and was not limited to a specific consumption generation, so it is advisable that future works use a probabilistic sampling with a longitudinal



approach directed towards a generation such as the millennial or centennial.

The results of this research lead to relevant managerial implications for the retail sector that offers slow and fast fashion clothing online. On the one hand, fast fashion platforms have faced increasing scrutiny over the last few years about their environmental impact (Garg, 2020) and, in response to this, some companies started to include small lines of slow fashion products that still need to be potentialized to avoid recent accusations of greenwashing or misleading acts of inclusion of sustainable practices by companies, such as fast fashion, that could pretend to confuse the market about the veracity of their environmental intentions (Lu *et al.*, 2022). Thus, according to the results found, a legitimate way to help consumers develop greater environmental awareness is to encourage the slow fashion consumer market. This would imply a transition to a more responsible and sustainable supply chain. On the other hand, more environmentally conscious consumers significantly enjoy the shopping experiences associated with products, emotions and the website, impacting satisfaction when shopping online. This opens up opportunities for an improvement in the quality of the products offered, for design processes and products to have more meaning and emotional value, and a reduction in the oversaturation of online catalogs.

## References

- Aladwani, A. and Palvia, P. (2002). Developing and validating an instrument for measuring user-perceived web quality. *Information & Management*, 39(6), 467-476. [https://doi.org/10.1016/S03787206\(01\)00113-6](https://doi.org/10.1016/S03787206(01)00113-6)
- Al-Marouf, R. S., Alshurideh, M. T., Salloum, S. A., AlHamad, A. Q. M. and Gaber, T. (2021). Acceptance of Google Meet during the spread of Coronavirus by Arab university students. *Informatics*, 8(2), 24. <https://doi.org/10.3390/informatics8020024>
- Artusi, F., Bellini, E., Dell'Era, C. and Verganti, R. (2020). Designing an Omni-Experience to save retailing. *Research-Technology Management*, 63(3), 24-32. <https://doi.org/10.1080/08956308.2020.1733886>
- Bascur, C. and Rusu, C. (2020). Customer experience in retail: A systematic literature review. *Applied Sciences*, 10(21), 7644. <https://doi.org/10.3390/app10217644>
- Brewer, M. K. (2019). Slow fashion in a fast fashion world: promoting sustainability and responsibility. *Laws*, 8(4), 1-9. <https://doi.org/10.3390/laws8040024>
- Boardman, R. and Chrimes, C. (2023). E-commerce is king: creating effective fashion retail website designs. En Ritch, E. L., Canning, C. and McColl, J. (eds.), *Pioneering new perspectives in the fashion industry: disruption, diversity and sustainable innovation* (pp. 245-254). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-80382-345-420231020>
- Cangur, S. and Ercan, I. (2015). Comparison of model fit indices used in structural equation modeling under multivariate normality. *Journal of Modern Applied Statistical Methods*, 14(1), 14. <https://doi.org/10.22237/jmasm/1430453580>
- Chen, T., Luo, H., Feng, Q. and Li, G. (2023). Effect of technology acceptance on blended learning satisfaction: The serial mediation of emotional experience, social belonging, and higher-order thinking. *International Journal of Environmental Research and Public Health*, 20(5), 4442. <https://doi.org/10.3390/ijerph20054442>
- Cuesta-Valiño, P., Gutiérrez-Rodríguez, P. and Núñez-Barriopedro, E. (2022). The role of consumer happiness in brand loyalty: a model of the satisfaction and brand image in fashion. *Corporate Governance: The International Journal of Business in Society*, 22(3), 458-473. <https://doi.org/10.1108/CG-03-2021-0099>
- Domingos, M., Vale, V. T. and Faria, S. (2022). Slow fashion consumer behavior: a literature review. *Sustainability*, 14(5), 2860. <https://doi.org/10.3390/su14052860>
- Ellison, B., McFadden, B., Rickard, B. J. and Wilson, N. L. W. (2021). Examining food purchase behavior and food values during the COVID-19 pandemic. *Applied Economic Perspectives and Policy* 43(1), 58-72. <https://doi.org/10.1002/aep.13118>
- Fuentes-Blasco, M., Moliner-Velázquez, B. and Gil-Saura, I. (2017). Analyzing heterogeneity on the value, satisfaction, word-of-mouth relationship in retailing. *Management Decision*, 55(7), 1558-1577. <https://doi.org/10.1108/MD-03-2016-0138>
- García-Salirrosas, E. E., Acevedo-Duque, Á., Marin Chaves, V., Mejía Henao, P. A. and Olaya Molano, J. C. (2022). Purchase intention and satisfaction of online shop users in develo-



- ping countries during the COVID-19 pandemic. *Sustainability*, 14(10), 6302. <https://doi.org/10.3390/su14106302>
- Garg, P. (2020). Introduction to fast fashion: environmental concerns and sustainability measurements. In: Shukla, V., Kumar, N. (eds.), *Environmental Concerns and Sustainable Development*. Springer, Singapore. [https://doi.org/10.1007/978-981-13-6358-0\\_18](https://doi.org/10.1007/978-981-13-6358-0_18)
- Gwozdz, W., Gupta, S. and Gentry, J. (2015). "Fashion Sustainability" Investigated: Does fashion or style generate more life satisfaction? In *Marketing as provisioning technology: integrating perspectives on solutions for sustainability, prosperity, and social justice: Proceedings of the 40th Annual Macromarketing Conference* (pp. 128-144). The Macromarketing Society. <https://bit.ly/3I0IXsW>
- Gutiérrez Rodríguez, P., Villarreal, R., Cuesta Valiño, P. and Blozis, S. (2020). A PLS-SEM approach to understanding E-SQ, E-Satisfaction and E-Loyalty for fashion E-Retailers in Spain. *Journal of Retailing and Consumer Services*, 57, 102201. <https://doi.org/10.1016/j.jretconser.2020.102201>
- Hair Jr., J. F., Howard, M. C. Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101-110. <https://doi.org/10.1016/j.jbusres.2019.11.069>
- Hair, J. F., Risher, J. J., Sarstedt, M. and Ringle, C. M. (2019a). When to use and how to report the results of PLS-SEM. *European business review*, 31(1), 2-24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Castillo Apraiz, J., Cepeda Carrión, G. and Roldán, J. L. (2019b). *Manual de partial least squares structural equation modeling (PLS-SEM)* (2da. ed.). OmniaScience.
- Hartmann, P. Apaolaza-Ibáñez, V. (2012). Consumer attitude and purchase intention toward green energy brands: The roles of psychological benefits and environmental concern. *Journal of Business Research*, 65(9), 1254-1263. <https://doi.org/10.1016/j.jbusres.2011.11.001>
- Henseler, J., Ringle, C. M. and Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43, 115-135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hossain, M. M. (2022). Green products purchase decision during COVID-19 pandemic: an emerging market perspective. *International Journal of Education and Social Science*, 9(1), 2415-1246.
- Joung, H. M. (2014). Fast-fashion consumers' post-purchase behaviours. *International Journal of Retail & Distribution Management*, 42(8), 688-697. <https://doi.org/10.1108/IJRDM-03-2013-0055>
- Jung, S. (2014). *Slow fashion: Understanding potential consumers and creating customer value for increasing purchase intention and willingness to pay a price premium*. [Doctoral Thesis of The University of North Carolina at Greensboro]. 3637547. <https://bit.ly/3wuz0S0>
- Kautish, P., Guru, S. and Sinha, A. (2022). Values, satisfaction and intentions: online innovation perspective for fashion apparels. *International Journal of Innovation Science*, 14(3/4), 608-629. <https://doi.org/10.1108/IJIS-10-2020-0178>
- Kock, N. (2015). Common Method Bias in PLS-SEM: A Full Collinearity Assessment Approach. *International Journal of e-Collaboration (IJeC)*, 11(4), 1-10. <https://doi.org/10.4018/ijec.2015100101>
- Kock, F., Berbekova, A. and Assaf, A. G. (2021). Understanding and managing the threat of common method bias: Detection, prevention and control. *Tourism Management*, 86, 104330. <https://doi.org/10.1016/j.tourman.2021.104330>
- Kumar, S., Dhir, A., Talwar, S., Chakraborty, D. and Kaur, P. (2021). What drives brand love for natural products? The moderating role of household size. *Journal of Retailing and Consumer Services*, 58, 102329. <https://doi.org/10.1016/j.jretconser.2020.102329>
- Li, M., Zhao, L. and Srinivas, S. (2023). It is about inclusion! Mining online reviews to understand the needs of adaptive clothing customers. *International Journal of Consumer Studies*, 47(3), 1157-1172. <https://doi.org/10.1111/ijcs.12895>
- Lindner, K. T., Savolainen, H. and Schwab, S. (2021). Development of teachers' emotional adjustment performance regarding their perception of emotional experience and job satisfaction during regular school operations, the first and the second school lockdown in Austria. *Frontiers in psychology*, 12, 702606. <https://doi.org/10.3389/fpsyg.2021.702606>
- Lu, X., Sheng, T., Zhou, X., Shen, C. and Fang, B. (2022). How does young consumers' greenwashing perception impact their green purchase intention in the fast fashion industry? An analysis from the perspective of perceived risk theory. *Sustainability*, 14(20), 13473. <https://doi.org/10.3390/su142013473>

- Mamakou, X. J., Zaharias, P. and Milesi, M. (2023). Measuring customer satisfaction in electronic commerce: The impact of e-service quality and user experience. *International Journal of Quality & Reliability Management*. Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/IJQRM-07-2021-0215>
- Miao, M., Jalees, T., Zaman, S. I., Khan, S., Hanif, N. U. A. and Javed, M. K. (2022). The influence of e-customer satisfaction, e-trust and perceived value on consumer's repurchase intention in B2C e-commerce segment. *Asia Pacific Journal of Marketing and Logistics*, 34(10), 2184-2206. <https://doi.org/10.1108/APJML-03-2021-0221>
- Michon, R., Chebat, J. C., Yu, H. and Lemarié, L. (2015). Fashion orientation, shopping mall environment, and patronage intentions: A study of female fashion shoppers. *Journal of Fashion Marketing and Management*, 19(1), 3-21. <https://doi.org/10.1108/JFMM-09-2012-0055>
- Mofokeng, T. E. (2021). The impact of online shopping attributes on customer satisfaction and loyalty: Moderating effects of e-commerce experience. *Cogent Business & Management*, 8(1), 1968206. <https://doi.org/10.1080/23311975.2021.1968206>
- Mustikasari, A., Krisnawati, M. and Sutrisno, E. (2021). Customer experience and repurchase intention in multi-channel: Customer satisfaction as mediating variable. *The Journal of Industrial Distribution & Business*, 12(3), 7-19. <http://dx.doi.org/10.13106/jidb.2021.vol12.no3.7>
- Pei, X. L., Guo, J. N., Wu, T. J., Zhou, W. X. and Yeh, S. P. (2020). Does the effect of customer experience on customer satisfaction create a sustainable competitive advantage? A comparative study of different shopping situations. *Sustainability*, 12(18), 7436. <https://doi.org/10.3390/su12187436>
- Rathinamoorthy, R. (2019). Consumer's awareness on sustainable fashion. En S. S. Muthu (ed.), *Sustainable Fashion: Consumer Awareness and Education* (pp. 1-36). Springer Singapore. [https://doi.org/10.1007/978-981-13-1262-5\\_1](https://doi.org/10.1007/978-981-13-1262-5_1)
- Ratnasari, R. T., Gunawan, S., Mawardi, I. and Kirana, K. C. (2021). Emotional experience on behavioral intention for halal tourism. *Journal of Islamic Marketing*, 12(4), 864-881. <https://doi.org/10.1108/JIMA-12-2019-0256>
- Rita, P., Oliveira, T. and Farisa, A. (2019). The impact of e-service quality and customer satisfaction on customer behavior in online shopping. *Heliyon*, 5(10), e02690. <https://doi.org/10.1016/j.heliyon.2019.e02690>
- Santos Saraiva, M.I. (2023). *Slow fashion in Portugal: An exploratory approach*. [Dissertações de Mestrado em Gestão da Informação] (Information Management). Universidade Nova. <https://bit.ly/3wgZfLH>
- Şener, T., Bişkin, F. and Dündar, N. (2022). The effects of perceived value, environmental concern and attitude on recycled fashion consumption. *Journal of Fashion Marketing and Management: An International Journal*, 27(4), 595-611. <https://doi.org/10.1108/JFMM-01-2021-0003>
- Silva, J., Sá, E. S., Escadas, M. and Carvalho, J. (2021). The influence of ambient scent on the pass-engers' experience, emotions and behavioral intentions: An experimental study in a Public Bus service. *Transport Policy*, 106, 88-98. <https://doi.org/10.1016/j.tranpol.2021.03.022>
- Tokar, T., Jensen, R. and Williams, B. D. (2021). A guide to the seen costs and unseen benefits of e-commerce. *Business Horizons*, 64(3), 323-332. <https://doi.org/10.1016/j.bushor.2021.01.002>
- Trivedi, S. K. and Yadav, M. (2020). Repurchase intentions in Y generation: mediation of trust and e-satisfaction. *Marketing Intelligence & Planning*, 38(4), 401-415. <https://doi.org/10.1108/MIP-02-2019-0072>
- Tsai, F. M. and Bui, T. D. (2021). Impact of word of mouth via social media on consumer intention to purchase cruise travel products. *Maritime Policy & Management*, 48(2), 167-183. <https://doi.org/10.1080/03088839.2020.1735655>
- Vasić, N., Kilibarda, M. and Kaurin, T. (2019). The Influence of Online Shopping Determinants on Customer Satisfaction in the Serbian Market. *Journal of theoretical and applied electronic commerce research*, 14, 70-89. <http://dx.doi.org/10.4067/S0718-18762019000200107>
- Wang, H., Liu, H., Kim, S. J. and Kim, K. H. (2019). Sustainable fashion index model and its implication. *Journal of Business Research*, 99 (December 2017), 430-437. <https://doi.org/10.1016/j.jbusres.2017.12.027>
- Xiaohong, M. (2019). A Study on the driving factors of rural tourists' environmental responsibility behavior. *7th International Education, Economics, Social Science, Arts, Sports and Management Engineering Conference (IEESASM 2019)*. <https://bit.ly/3OIJqE0>
- Xu, J., Zhou, Y., Jiang, L. and Shen, L. (2022). Exploring sustainable fashion consumption behavior in the post-pandemic era: changes in the antecedents of second-hand clothing-sharing in China. *Sustainability*, 14(15), 9566. <https://doi.org/10.3390/su14159566>

- Yeh, C. H., Lin, H. H., Gau, Y. L. and Wang, Y. S. (2022). What drives customers' purchase behavior in a click-and-mortar retailing context: a value transfer perspective. *Journal of Enterprise Information Management*, 35(6), 1658-1677. <https://doi.org/10.1108/JEIM-10-2019-0344>
- Yin, W. and Xu, B. (2021). Effect of online shopping experience on customer loyalty in apparel business-to-consumer e commerce. *Textile Research Journal*, 91(23-24), 2882-2895. <https://doi.org/10.1177/00405175211016559>
- Yoon, N., Lee, H. K. and Choo, H. J. (2020). Fast fashion avoidance beliefs and anti-consumption behaviors: The cases of Korea and Spain. *Sustainability*, 12(17), 6907. <https://doi.org/10.3390/su12176907>
- Zameer, H. and Yasmeeen, H. (2022). Green innovation and environmental awareness driven green purchase intentions. *Marketing Intelligence & Planning*, 40(5), 624-638. <https://doi.org/10.1108/MIP-12-2021-0457>
- Zarantonello, L. and Schmitt, B. (2010) Using the brand experience scale to profile consumers and predict consumer behaviour. *J Brand Manag*, 17, 532-540. <https://doi.org/10.1057/bm.2010.4>