

Factors influencing sustainable consumption behaviour in generation Z

Factores que influyen en el comportamiento de consumo sostenible en la generación Z

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Abstract: this research analyzes the relationship between sustainable consumption behavior with perception, practices and perceived attributes in products and manufacturers around responsible consumption in generation Z. For this a descriptive study was made, quantitatively. A digital survey was carried out on 903 adults born in Bogotá since 1995. The statistical analysis was performed using a confirmatory factor analysis to identify if the variables are grouped in the proposed constructs, followed by a causal model based on an analysis of structural equations, with the bootstrapping methodology in order to validate the proposed hypotheses. The results prove the existence of the proposed factors and it was identified that responsible consumption habits, attitude towards responsible consumption and product attributes affect sustainable consumption behavior. However, the perceived attributes of the manufacturer do not have a direct relationship with it, although when the attributes of the manufacturer are mediated by the attributes of the product there is incidence. These findings contribute to scientific knowledge since the current literature has not analyzed the relationship between the manufacturer with responsible production and the attributes of responsible consumer products perceived by the consumer. For this reason, manufacturers must improve their efforts to communicate and bring environmentally friendly products to market.

Keywords: consumer attitudes, consumption, consumer behaviour, generation Z, responsible consumption.

Resumen: esta investigación analiza la relación entre comportamiento de consumo sostenible con la percepción, las prácticas y los atributos percibidos en los productos y los fabricantes en torno al consumo responsable en la generación Z. Para esto se hizo un estudio descriptivo, con enfoque cuantitativo. Se aplicó una encuesta en formato digital a 903 adultos nacidos a partir de 1995 en la ciudad de Bogotá. El análisis estadístico se realizó mediante un análisis factorial confirmatorio para identificar si las variables se agrupan en los constructos propuestos, seguido se realizó un modelo causal a partir de un análisis de ecuaciones estructurales, con la metodología de *bootstrapping* con el fin de validar las hipótesis propuestas. Los resultados comprueban la existencia de los factores propuestos y se identificó que los hábitos de consumo responsable, la actitud hacia el consumo responsable y los atributos del producto inciden en el comportamiento de consumo sostenible, sin embargo, los atributos percibidos del fabricante no tienen una relación directa con este, aunque cuando los atributos del fabricante son mediados por los atributos del producto existe incidencia. Estos hallazgos aportan al conocimiento científico ya que la literatura actual no ha analizado la relación entre el fabricante con producción responsable y los atributos de productos de consumo responsable percibidos por el consumidor. Por tal razón, los fabricantes deben mejorar sus esfuerzos en comunicar y llevar al mercado productos amigables con el medio ambiente.

Palabras clave: actitudes del consumidor, consumo, comportamiento del consumidor, generación Z, consumo responsable.

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Introduction

Responsible consumption is currently one of the most important aspects in environmental public policies in nations, which implies a commitment by companies and brands to provide products and services with both social and environmental responsibility, especially for younger generations, since this effect will be relevant in current and future consumption (Stănescu, 2018). Therefore, the relationships between the attributes perceived by consumers towards manufacturers and their products and services can be a trigger to activate consumption with environmental responsibility from a critical stance on excessive consumption by modifying their lifestyle from home, depending on the protection of the planet for themselves and future generations (Han and Stoel, 2017; Hosany *et al.*, 2022).

The appropriation of the consumer to the social and environmental care of the planet generates important changes in the attitudes of new consumers of products and services (Hosany *et al.*, 2022), among which the generation Z stands out, who according to Sharma (2019) have adopted new purchasing methods or present changes in consumption due to the awareness of the excessive consumption. This generation corresponds to those born between 1995 and 2010, who represent a critical generation with society (Arango *et al.*, 2019), since their main manifestation mechanism has been the use of social networks (Jiménez *et al.*, 2019), they are consumers committed to social and environmental causes recognizing problems such as climate change, little understanding in the final disposal of waste and little culture in the recycling process, so these consumers dynamize the economic sector with a broad perspective on responsible consumption (Su *et al.*, 2019; Thompson and Kumar, 2018).

This generation relates responsible consumption from the degree of innovation, technology and sustainability (Arango *et al.*, 2019) and their attitudes are associated with responsible consumption practices motivated by social, economic or environmental problems, being focused on the generation of a supportive behavior by each individual with society (Thompson and Kumar,

2018), so their perception highlights the eco-environmental sense in most of their daily actions, and at the same time critical against the actions of organizations, which facilitates their position both to support and affect the reputation of brands (Dragolea *et al.*, 2023; Madrigal *et al.*, 2021).

Previous studies on environmentally responsible behavior have developed a basic theory on the factors that involve this behavior such as attitudes, knowledge, willingness and the ability to act (Mason *et al.*, 2022), as well as studies from the ethical perception of the consumer and its relationship with the purchase intention, where the ethics of consumption is related, based on the relationships between the perception of the attributes of a product and the effect of the corporate or manufacturer brand and the product itself and the purchase (Jham and Malhotra, 2019), hence this type of research becomes a relevant input in the scientific knowledge about the behavior in responsible consumption from the perception of the attributes of both products and brands.

Therefore, this research aims to analyze the relationship between the behavior of sustainable consumption with the attitude, practices and attributes perceived in products and manufacturers around responsible consumption in generation Z living in Bogotá, since this type of studies are relevant for analyzing the consumer in terms of their tastes and preferences, and it allows to understand how this trend is immersed in the development of adequate consumption practices from home in generation Z (Stănescu, 2018; Robinson and Schänzel, 2019; Sharma, 2019). This work is divided into five sections: the first makes a review of the literature to analyze the variables in reference to the proposed model and as a basis for the hypotheses proposed; followed by the methodology used, the results obtained based on the statistical analysis, the discussion and the conclusions.

Attitude towards responsible consumption

Attitude is a construct that has been studied in different consumer contexts and is defined as a willingness or value judgment grounded by the belief system and social context (Ajzen,

1991). Beliefs are supported by perceptions, which are understood as the interpretation process of stimuli that generates a mental impression and turns out to be more influential in behavior than knowledge of objective reality (Shiffman *et al.*, 2010). Responsible consumption has managed to establish levels of commitment to environmental care in society, and they are categorized according to the capacity for acceptance and responsible participation in the national and international market (Auer, 2018). As a result, concepts such as sustainable development have played an important role in the changes of perspective of each of the consumers worldwide, achieving that increasingly critical positions are established and adjusted to the current reality of the planet, especially in the social, economic and environmental contexts (Acuña and Severino, 2018).

Therefore, the attitude in the responsible consumer is related to the ability to be aware in their purchasing acts, as well as the degree of concern against negative actions during the process of manufacturing, distribution and marketing of products (Pawaskar *et al.*, 2018) as a response to training in social consciousness, where the cultural and social context, which is based on the eco-friendly value system and beliefs, evokes habits and practices supported by value judgments with a high sense of ethics and morality (Contreras and Pulache, 2017; Dragolea *et al.*, 2023; Severino *et al.*, 2022; Wakeman *et al.*, 2021). The perception of the consumer towards a responsible transition of consumption is posed according to the construction of meanings and mental models that act as adjusted representations of reality and become the behavioral basis for purchasing decisions (Krüger and Strüver, 2018). Based on the above, the following hypothesis is proposed:

H1: Attitude towards responsible consumption has a positive mediating effect on activities in responsible consumption.

Since the 20th century, the growth of environmental awareness has been evident, where the attitude remains a pre-requisite of intention and responsible behavior (Wang *et al.*, 2021), given that the attitude in the consumer is supported by beliefs, which translate into the benefits and ex-

periences that validate the purchasing behaviors adopted in terms of satisfaction (Nacipucha and Andrade, 2018). Hence, the sense of protection towards the environment determines responsible behavior (Chwialkowska *et al.*, 2020), however, a gap has been observed between attitude and intention (Bernardes *et al.*, 2018; Park and Lin, 2020; Wang *et al.*, 2021) in both purchasing and responsible consumption behavior, which shows that not necessarily greater environmental awareness translates into responsible behavior. This gap can be explained by the fact that the attitude towards responsible consumption is indirectly affected by personal reasons (Wang *et al.*, 2021) such as the perception that a responsible behavior assumed by a subject actually generates an environmental or social benefit, motivating the action (Zheng *et al.*, 2020). Based on the above, the following hypothesis is proposed:

H2: Attitude towards responsible consumption has a positive mediating effect on responsible purchasing behavior.

Responsible consumption activities

The consumer associates their purchasing attitudes with their beliefs and values, so it is one of the aspects that most contributes to the capacity of generating environmental awareness with regard to economic well-being, emotional support, lifestyle and social processes (Song and Kim, 2018). In such a way that social groups allow comparing the values acquired in their family, which allow to modify their perspective regarding the socialization of the members, the norms of behavior imposed in each society and the formation of own concepts generated from experiences (Ali and Mandurah, 2016). It involves the activities that he/she understands and contributes to the environment for what he/she consumes and avoids consuming (Robinson and Schänzel, 2019). Based on the above, the hypothesis is:

H3: Responsible consumption activities have a positive mediating effect on responsible purchasing behavior.

Attributes perceived towards the manufacturer in responsible consumption

Responsible consumers prioritize aspects such as: the responsibility of companies with the well-being of the community, respect for work practices, business ethics, the environmental impact generated by each organization and the additional contribution of each company to compensate the use of natural resources with their work (Ertz *et al.*, 2018; García-Salirrosas, 2023). In this sense, the responsible consumer analyzes various social and environmental elements from the product or service that he/she wishes to acquire such as its manufacturing process (Groening *et al.*, 2018), the working conditions of the production company, respect for human rights, the experimental use of animals and the contributions offered to society (Acuña and Severino, 2018).

Berger and Corbin (1992) propose that consumer perceived effectiveness (CPE) is the perception of the effect of a specific behavior respect to a personal concern related to the environment when thinking to have control or the ability to solve the environmental problem (Dermody *et al.*, 2018; Park and Lin, 2020), which operates in a similar way to an individual assessment of the effect that would act in one way or another in front of an environmental contextual problem. CPE is considered a key factor in young consumers and it determines the sustainable purchasing decision (Joshi and Rahman, 2019) and predicts the pro-environmental behavior that positively affects, non-directly, the behavior purchase (Dermody *et al.*, 2018). Thus, without an adequate CPE the involvement of the subject is not obtained (Schlaile *et al.*, 2018), so the CPE relates to the perceptions held against the product and the manufacturer in the pro-environmental context. In this way, with the above, the following hypotheses are proposed:

H4: Attitude towards responsible consumption has a positive mediating effect on manufacturer attributes perceived in the context of responsible consumption.

H5: Manufacturer attributes perceived in the context of responsible consumption

have a positive mediating effect on purchasing behavior

Studies such as those proposed by Hatch and Schultz (2010) and Jham and Malhotra (2019) emphasize that the perception of brand ethics is the result of the manufacturer's actions in production processes and their impact on the environment, thus generating a brand reputation effect, associated with perceived attributes that generate a socially responsible imaginary, so it generates credibility on the manufacturer. In this sense, Mason *et al.* (2022) infer that socially responsible behavior is directly linked to avoiding consuming products whose manufacturers do not offer a clear pro-environmental action, so that the belief system generated by the manufacturer becomes a relevant input to the model proposed in this study. Therefore, considering the above, the following hypothesis is proposed:

H6: Perceived manufacturer attributes have a positive mediating effect on perceived product attributes in the context of responsible consumption.

Attributes received on the product in responsible consumption

Some studies have addressed the effect of pro-environmental perceptions on products (Jain *et al.*, 2022), and although much of the current research regarding responsible purchasing behavior has already been supported by attitude through the Theory of Planned Behavior (Carfora *et al.*, 2019; Choi and Johnson, 2019; Cristancho, 2023; Jain, 2019; Kumar *et al.*, 2021; Prendergast and Tsang, 2019; Roos and Hahn, 2019; Setyawan *et al.*, 2018; Si *et al.*, 2020; Taufique & Vaithianathan, 2018; Yuriev *et al.*, 2020), and in reasoned action theory (Chang & Watchravesringkan, 2018; Cheah *et al.*, 2021; Minton *et al.*, 2018; Nguyen *et al.*, 2019; Paço *et al.*, 2019; Rausch & Kopplin, 2021); in both operates the social influence and attitudes as predictors intention and subsequent behavior; these being the most relevant when the belief system is directly related to the characteristics of the product. Thus, in sustainable consumption behavior (Geiger *et al.*, 2018, Jiang and Pu, 2022; Kreuzer *et*

al., 2019; Marzouk *et al.*, 2020; Pilgrimienè *et al.*, 2020) it is based on purchasing, use and disposal behavior in specific categories in the ecological and socio-economic dimensions. In this way, with the above, the following hypothesis is proposed:

H7: Attitude towards responsible consumption has a positive mediating effect on product attributes perceived in the context of responsible consumption.

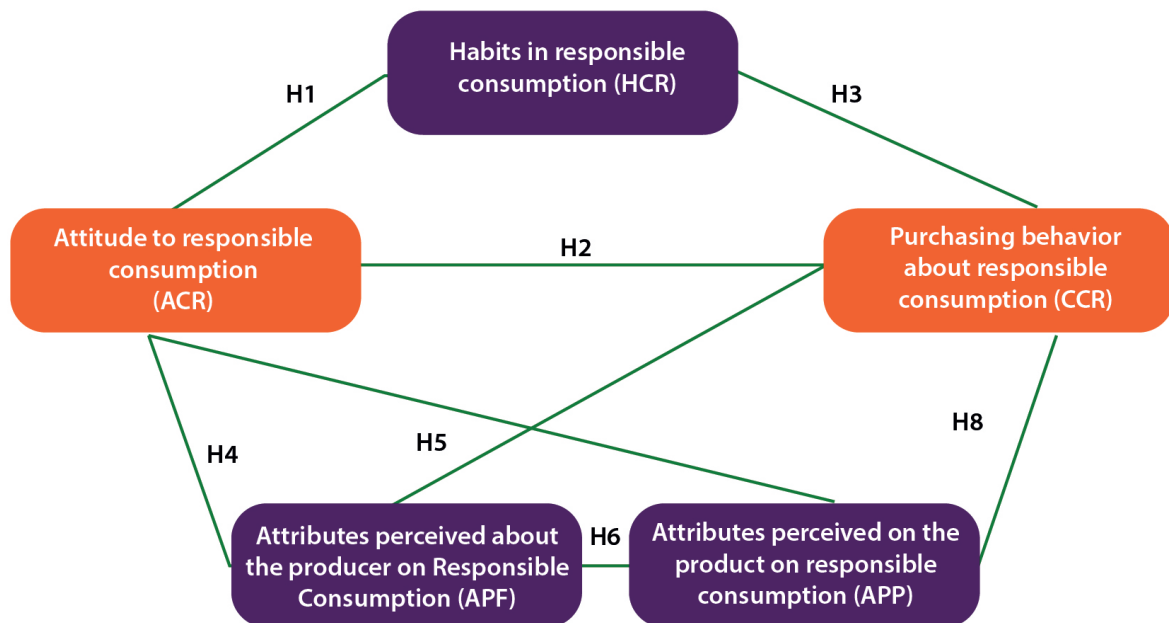
Hatch and Schultz (2010) and Jham and Malhotra (2019) establish that the attributes perceived by products directly influence responsible consumption, these aspects being associated with ingredients or raw materials, manufacturing processes, marketing and disposal in the context of

environmental impact. This is also addressed by Mason *et al.* (2022) who propose that responsible behavior involves doing recycling actions and avoiding the consumption of products from manufacturers that do not perform corporate social responsibility actions, as well as avoiding the purchase and consumption of products that have a high environmental impact (Jia *et al.*, 2023). In view of the above, the following scenario is proposed:

H8: Perceived product attributes have a positive mediating effect on responsible purchasing behavior

According to the literature review, Figure 1 shows the proposed model.

Figure 1
Proposed model



Materials and method

This descriptive, transversal, non-experimental research aims to analyze the relationship between sustainable consumption behavior with the perception, practices and attributes perceived in products and manufacturers around responsible

consumption. Men and women of the city of Bogotá were used as reference, adults born between 1995 and 2003, which correspond to adult population belonging to generation Z. According to the National Department of Statistics (DANE) in Bogotá, this population corresponds to 1 274 714 men and women; for this the sample was estimated taking as a criterion a confidence level of 95%,

a margin of error of 5%, obtaining a total sample of 385, however, 903 surveys were obtained.

As a collection instrument, a questionnaire designed in the Google forms platform was used, composed of two parts, the first focused on characterizing the participating population, the second focused on assessing responsible consumption with 30 reagents which were valued with a Likert-type response of 5 points (1=Totally disagree, 5=Totally disagree), to determine the atti-

tude towards responsible consumption (ACR), the activities or habits related to responsible consumption (HCR), the attributes perceived towards the manufacturer in responsible consumption (APF), the attributes perceived in the product in responsible consumption (APP), and finally the behavior of buying in responsible consumption (CCR). The table shows the variables under study and the authors on which the reagents were created.

Table 1
Dimensions associated with responsible consumption purchasing perceptions

Dimension	Variable	Authors
Attitude about responsible consumption (ACR)	I believe that environmental preservation relates to responsible consumption	Dragolea <i>et al.</i> (2023); Quoquab <i>et al.</i> (2019).
	I believe on saving natural and monetary resources	
	I believe that appropriate use should be made of materials and resources	
	I believe that products should have a longer shelf life	
	I have environmental awareness whenever I consume products	
	I try to consume environmentally friendly products	
	I try to buy only the products I need	
	I consider buying reusable bags	
	I have environmental awareness whenever I buy products	
	I try to be aware of the proper disposition of materials I discard	
I try to buy products with minimal carbon footprint		
Attributes perceived on the product in Responsible Consumption (APP)	The product indicates how to recycle	Jham & Malhotra (2019); Nittala (2014); Song <i>et al.</i> (2019).
	The product indicates how its final disposition should be	
	The product indicates its environmental impact	
	The product indicates its social impact on sales and consumption	
	The product indicates the form of reuse	
The product indicates whether animal testing was carried out during the manufacturing process		
Habits of Responsible Consumption (HCR)	Reused the glass containers	Mason <i>et al.</i> (2022); Ali and Mandurah (2016), Stănescu (2018), Robinson and Schänzel (2019).
	Reused plastic containers	
	I recycle in my home	
	Buy reusable products	
	I reduce the use of appliances and turn them off when I do not use them	
I buy products packed in glass		

Dimension	Variable	Authors
Attributes received on the manufacturer in Responsible Consumption (APF)	Manufacturer indicates whether it uses environmentally friendly manufacturing materials	Pokholkov & Zaitseva (2017); Ertz <i>et al.</i> (2018).
	Manufacturer indicates whether it uses environmentally friendly packaging material	
	Manufacturer indicates whether it uses a clean production process	
	The manufacturer indicates the origin or place of origin of the product	
Purchasing behavior on Responsible Consumption (CCR)	I only buy the products I need and will actually use	Dragolea <i>et al.</i> (2023); Quoquab <i>et al.</i> (2019) and Severino-González <i>et al.</i> (2022).
	I take my own reusable bag to the supermarket	
	I buy biodegradable and/or organic products	

For data analysis, SPSS v26 and AMOS v24 software were used. An exploratory factor analysis (EFA) was done in the first instance in order to verify the grouping of the reagents against each proposed factor in a preliminary way, as well as to identify variables with factor loads below 0.7 and define whether these will be part of the study. Then, a confirmatory factor analysis (CFA) was conducted to validate the proposed questionnaire, considering the variables with satisfactory results of the EFA. Finally, an analysis of structural equations in the AMOS program was conducted, which takes as reference the analysis of covariances, which implies maximum likelihood seeking to minimize the difference between the observed and estimated covariance matrices, additionally it allows to explain the mediation of the variables in both direct and indirect effects (Hair *et al.*, 2014). It is worth clarifying that there are other methodologies of analysis of structural equations that use the least squares method which offer versatility in the results of exploratory studies (Soriano and Mejía-Trejo, 2022).

The causal model was tested with the bootstrapping methodology, which is a resampling technique that allows to extract subsamples randomly from the original sample, which in turn estimates models in each subsample (Efron and Tibshirani, 1993) without depending on the type of distribution. As the proposed model has hypotheses associated with indirect effects, this technique allows to validate the hypotheses proposed from a theoretical model (Ledesma, 2008); 5000 subsamples were taken as reference in order to have more reliable results since measurements higher

than this would not yield significant advantages, and in terms of the percentile level of the confidence intervals it was estimated over 90%, and was corrected to 95% in order to mitigate the inflation effect of the data generated by the technique.

Results and discussion

The study sample is characterized mainly by being mostly female (n=512, 56.7 %) than male (n=391; 43.3 %), with a low socioeconomic level (n=368; 40.8 %) and medium (n=518; 57.4 %); with a level of professional education (n=661; 73.2 %) and high school education (n=242; 26.8 %).

For validating the dimensions of analysis, an EFA was developed with the maximum likelihood extraction method and with Varimax rotation, however, it was observed that there were variables with factorial load less than 0.7 so 15 variables were eliminated from the study. The results obtained were satisfactory both in the KMO test (0.904) as well as significance in the Barlett sphericity test ($p < 0.001$); the model converged on five factors, explaining 51.95% of the variance. With these results, the AFC was developed, where the maximum likelihood method was used for estimating the goodness of fit parameters, obtaining a value for the acceptable square Chi ($\chi^2 = 325.69$; $p < 0.001$; $gl = 125$). Table 2 shows that all reagents obtained factor loads higher than 0.7 and Cronbach's Alpha obtained results higher than 0.7 in each factor.

Table 2
Reliability and internal consistency

Factor	Variable	Factor Load	Alpha de Cronbach
Attitude towards responsible consumption (ACR)	ACR1	0.841	0.903
	ACR2	0.766	
	ACR3	0.790	
	ACR4	0.737	
	ACR5	0.722	
	ACR6	0.723	
	ACR7	0.713	
Attributes perceived on the product in responsible consumption (APP)	APP1	0.902	0.843
	APP2	0.809	
	APP3	0.710	
Habits towards responsible consumption (HCR)	HCR1	0.795	0.759
	HCR2	0.800	
	HCR3	0.719	
Attributes perceived on the manufacturer in responsible consumption (APF)	APF2	0.709	0.732
	APF 3	0.782	
	APF 4	0.712	
Responsible Purchasing Behavior (CCR)	CCR4	0.738	0.775
	CCR5	0.856	

Table 3 shows the results of the convergent validity, where it is shown that the composite reliability index (CR) obtained results greater than 0.7 (Hu and Bentler, 1999) and the extracted average variance (AVE) values greater than 0.5 (Fornell and Larcker, 1981) less for APF, additionally it meets the criterion of the Heterotrait-Monotrait

Ratio of Correlations (HTMT) obtaining values less than 0.9 in such a way that the discriminant validity is met (Henseler *et al.*, 2015). In the case of discriminant validity, it is observed that the correlations between constructs are lower than the value of the square root of the AVE, thus fulfilling the criterion of Fornell and Larcker (1981).

Table 3
Convergent and discriminatory validity

	CR	AVE	MSV	HCR	PCR	APF	CPC	APP
HCR	0.77	0.532	0.077	0.729				
ACR	0.904	0.573	0.085	0.092*	0.757			
APF	0.739	0.488	0.327	-0.021	0.192***	0.699		
CPC	0.779	0.639	0.126	0.277***	0.291***	0.251***	0.799	
APP	0.851	0.658	0.327	0.151***	0.264***	0.571***	0.354***	0.811

Note. ***=p<0.001

From the bootstrapping technique with a sampling of 5000 subsamples the causal relationships raised in the hypotheses are evaluated. The model obtained an R^2 for responsible purchasing behavior of 0.214, for attributes perceived towards the product in responsible consumption 0.351, attributes perceived from the manufacturer 0.037 and for responsible consumption activities 0.009. The goodness of fit indices of the model ($\chi^2=343.51$; $gl=127$; $p<0.001$), achieved satisfactory results in all $CMIN/DF=2.855$, $CFI=.965$, $NFI=.948$, $TLI=.959$, $RMR=.051$, $PNFI=.799$, $PCFI=.814$, $RMSEA=.045$, $Pclose=.918$, according to the criteria of Hu and Bentler (1999).

Table 4 presents the results for each hypothesis where it can be observed that there is significant influence between ACR and HCR ($\beta=0.093$; $P<0.05$), the same happens between HCR and

CCR ($\beta=0.174$; $P<0.001$), so that there is an indirect effect between perceptions and purchasing behavior, since the direct effect between these variables is significant ($\beta=0.14$; $P<0.001$). On the other hand, it is observed that there is significant influence between the ACR and APP ($\beta=0.136$; $P<0.001$), as well as between the APPCR and CPCR ($\beta=0.29$; $P<0.001$), and it is evident that there is a direct relationship. Similarly, it is observed that there is a positive influence between the ACR and APF ($\beta=0.24$; $P<0.05$) and the APF and APP, so that aspects related to products and manufacturers significantly influence the purchase of products with a responsible consumption approach. However, it was found that there is no significant influence between APF and CCR ($\beta=0.20$; $P<0.001$).

Table 4
Hypothesis test result

	Hypothesis		Path coefficient	H.E.	C.R.	P value	Comment
H1	ACR →	HCR	0.094	0.06	2.409	*	Accepted
H2	ACR →	CCR	0.195	0.044	4.85	***	Accepted
H3	HCR →	CCR	0.229	0.03	5.503	***	Accepted
H4	ACR →	APF	0.192	0.043	4.649	***	Accepted
H5	APF →	CCR	0.09	0.056	1.712	0.08	Rejected
H6	APF →	APP	0.541	0.059	10.877	***	Accepted
H7	ACR →	APP	0.16	0.042	4.637	***	Accepted
H8	APP →	CCR	0.224	0.406	4.31	***	Accepted

Note. *= $p<0.05$; **= $p<0.01$; ***= $p<0.001$

Table 5 shows the results of indirect effects, and they suggest that the level of significance in double track for standardized indirect effects in all cases was $p<0.001$, so the effect mediation is complete, which means that the behavior towards responsible consumption from the ACR is mediated by both HCR, APP and APF, because the direct effect between the ACR and CCR was

previously identified. However, establishing the mediating effects of HCR on the CCR implies that routines and habits when appropriated by a group of consumers evoke an effect consisting of purchasing actions. Similarly, both APP and APF when perceived by the consumer are relevant in the CCR. However, it must be taken into account that the behavior towards responsible consumption from the APF is partially mediated by the APP.

Table 5
Outcome of indirect effects

Hypothesis	Direct effect	Indirect effect	Comment
ACR → HCR → CCR	0.195***	0.098***	Complete Mediation
ACR → APF → CCR	0.195***	0.098***	Complete Mediation
ACR → APP → CCR	0.195***	0.098***	Complete Mediation
ACR → APF → APP	0.127**	0.104***	Complete Mediation
APF → APP → CCR	0.129**	0,090	Partial mediation

Note. *= $p < 0.05$; **= $p < 0.01$; ***= $p < 0.001$

This research shows the positive influence that the attitude has on responsible behavior, which is mediated both by the activities or habits in responsible consumption, aspect proposed in the first hypothesis (H1), where generation Z is characterized by being more environmentally perceptive by individuals and therefore adopts responsible consumption habits, where the attitude drives the action of younger consumers towards sustainability given the relationship between their moral identity and pro-environmental behavior, aspects recognized in the present study, and that have already been identified in several previous investigations (Hosta and Zabkar, 2021; Mejía-Gil, 2018; Pérez-Martínez and Topa, 2018; White *et al.*, 2019; Wu and Yang, 2018).

As for H2, it is observed that there is a positive mediating effect between the ACR and the CCR, an aspect that has been mentioned in previous research, where it is verified that purchasing behavior and positive attitudes towards responsible products are related to each other (Jaiswal and Sigh, 2018; Nguyen *et al.*, 2019), being consistent with the previous premise that the attitude triggers intention (Ajzen, 1991; Wang *et al.*, 2021). In that sense, the third hypothesis (H3), shows that there is a positive mediating effect between the HCR and the CCR, an aspect that has also been identified in the studies developed by Prendergast and Tsang (2019) and López and Peñalosa (2021) where it is established that young consumers are increasing their social awareness, through their actions and therefore when they make their purchasing decisions. Thus, a strong relationship between positive attitudes and the purchase of socially responsible products is iden-

tified, so the relationship of the indirect effect between the ACR mediated by the HCR to the CCR proposed in this research is coherent.

On the other hand, the relationship between the ACR and the APF (H4), emphasizes the presence of responsible activities, the origin or environmental impact of the manufacturer, so the ACR is a significant predictor of the intention to buy products derived from companies based on their performance in Corporate Social Responsibility (CSR), aspects that have also been identified in the investigations proposed by Prendergast and Tsang (2019), so that there is a relationship between ethical attributes of the consumer and ethical purchasing (Jham and Malhotra, 2018). However, in this study it was observed that APFs do not affect the CCR (H5). However, the results of indirect effects suggest that socially responsible behavior actions do influence to some degree the purchase of products from companies with good social or environmental behavior, since they are more willing to pay an overprice on products whose manufacturer promotes social causes, an aspect that can contrast with purchase decisions oriented on price conditions and the confidence or reputation of a manufacturer brand on its product portfolio. These aspects were identified in this study and have also been reviewed with similar results in different investigations (Amezcuca *et al.*, 2018; Araya and Rojas, 2020; Del Giudice *et al.*, 018; Liu and Xu, 2023; Palacios-González and Chamorro-Mera, 2020).

Although sustainable consumption and production play an essential role in promoting sustainable development (Wang *et al.*, 2019) and therefore constitute a topic of growing interest (Wang *et al.*, 2019), as methods of assortment and production planning take into account the envi-

ronmental concerns of the consumer as a planning factor (Umpfenbach *et al.*, 2018), the link that the consumer makes between a manufacturer with responsible production and the attributes of responsible consumer products (H6) is not evident in the current literature, constituting this perception a novelty in relation to the factors associated with responsible purchasing behavior.

This research highlights the positive mediating effect between ACR and APF (H7), as also evidenced in the study developed by Lawley *et al.* (2019) where consumers concerned about effects on the health and sustainability of the products they consume give more importance to the characteristics of the products. A positive effect of ecological literacy and self-efficacy in the attitude towards organic products has also been observed (Al Mamun *et al.*, 2018), so that the relationship proposed by Jham and Malhotra (2019) and Mason *et al.* (2022) against the incidence of ACR against the APP is evident in the present study.

In addition, studies such as those proposed by Grazzini *et al.* (2021) and Trudel (2019) have addressed the direct relationship between the APP and the CCR (H8), as identified by this research. However, these preferences for sustainable products and their attributes depend on how these considerations of choice are formed by the consumer; and although the research proposed by Coşkun *et al.* (2022) establish that consumers have a positive attitude to responsible products, this research reports results where such a relationship is present and that the effect mediated from the ACR through the APP does have an effect on the CCR.

The model proposed in this research centrally locates the perception of generation Z regarding responsible consumption and responsible purchasing behavior, while showing that factors such as responsible consumption activities, attributes of responsible consumption products and attributes of responsible manufacturer moderate responsible purchasing behavior. Recognizing that socially responsible behavior has a multidimensional character (Palacios-González and Chamorro-Mera, 2020), the study of perceptions and responsible consumption activities against such behavior should be considered.

Conclusions

This article analyzed the influence on responsible consumption behavior in factors such as responsible practices at the home, related with beliefs, perception towards the product and responsible consumption, finding that the proposed model describes the activities in terms of recycling, reusing materials and buying reusable products; and its impact on the environment as if it is biodegradable or ecological, as well as the separation for its final disposal and use of reusable bags substitutes for plastic bags. Perceptions that affect responsible purchasing are divided between the product and the manufacturer. From a product perspective, buyers consider attributes such as recycling once used, how to dispose it, and the possibility of reuse. From the manufacturer's perspective, the considerations of generation Z are oriented to concerns related to the manufacturing material, the origin of the product and the clean production related with the environmental impact.

Generation Z has developed an environmental awareness that seeks to limit consumerism. For them, responsible consumption is related to environmental impact, which is linked to friendly products, the use and proper use of resources, environmental preservation, the shelf life of products, and zero carbon footprints. This determines that the most representative behaviors and perceptions of the responsible behavior of generation Z focus on three fundamental elements: reuse, recycling and final disposal. This is how this generation recognizes current problems and has formed an environmental awareness that demands products and production processes consistent with their way of thinking.

Therefore, the corporate social responsibility actions of the manufacturer brand are transferred to their products, and have an impact on the perception of consumers with pro-environmental practices, an aspect that affects their purchasing behavior. Therefore, it is important to mention that the manufacturer must provide consistency in its activities to the benefit of the environment and at the same time generate credibility on the effectiveness of such actions.

Whenever society makes efforts to reduce pollution, reduce waste, produce with less impact, rationalization in the use of natural resources, as well as the development of a legal framework that promotes a change of our current consumption practices, they can only be served to the extent that marketing activities focus on an emerging responsible consumer that in the near future will constitute a relevant segment of the market, as is the generation Z. For future research, it is pertinent to replicate the model proposed in millennial and X generations, in order to verify whether the results are significantly similar and whether the variables proposed in the resulting model also exert influence on responsible behavior and whether this effect is also observed in other cultural contexts, as well as to develop studies that demonstrate the intention to purchase environmentally friendly products and derivatives of recycling.

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