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Research article

Influence of companies´credibility and trust in corporate social responsibility aspects of consumer food products: The moderating intervention of consumer integrity

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ABSTRACT

This study aims to explore and understand whether corporate social responsibility (CSR) could be considered as an indirect cue of certain product characteristics, turning it into an effective instrument to encourage credibility and trust in a food brand and thereby influence consumers' purchase intention; the study also considers how consumers' integrity influences these effects of trust and credibility. The proposed model and the mediation and moderation hypotheses were tested with conditional process analysis and were generally supported by data collected from 252 consumers. The results have important implications for companies, revealing that CSR dimensions impact consumer purchase intention by generating greater credibility and trust. Moreover, among consumers with higher integrity, the effects are more significant. Finally, it is the economic dimension of CSR that has the clearest impact on consumer intentions.

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1. Introduction

Consumer interest in corporate social responsibility (CSR) practices has heightened considerably in recent years. Global consumers are increasingly aware of companies' environmentally friendly, economic and socially responsible practices (Vitell, 2015) and of their short- to medium- and even long-term effects. Companies have implemented CSR actions into their businesses to help the environment and to be competitive in the market (Suganthi, 2019); the importance gained by these practices means that most companies are developing CSR strategies that are more complete and complex. The investment of Spanish companies in social responsibility projects is growing annually (Fundación SERES & Deloitte, 2019). In 2018 a total of 1,246 million euro was invested in 14,648 projects – 62% more than the previous year, according to the same Fundación SERES & Deloitte, 2019 report. Food and beverage firms are among the companies that invest the most. Seven of the thirteen most responsible Spanish companies are food and beverage firms, and they actively produce and promote responsible consumption. The adoption of this type of practice enables companies to better compete in the market (Suganthi, 2019). The tendency to finance CSR programs reflects companies' inescapable beliefs that consumers (as academic literature demonstrates) will reward their efforts with positive word-of-mouth (Chu and Chen, 2019), positive advocacy behaviors (Castro-González et al., 2019) and intentions to purchase and repurchase (Öberseder et al., 2013), which subsequently increases their sales volume and their company benefits. To achieve these behaviors, consumers also experience attitudinal processes related to company satisfaction (Barcelos, 2015), identification (Pérez et al., 2013) or loyalty (Mandhachitara and Poolthong, 2011). However, it appears that no studies consider CSR as an indirect cue of certification or quality that affects a company's credibility and a consumer's trust in it and its products.

The constant increase in food supply on the markets has led to a progressively complex marketplace (Armendáriz et al., 2016) where there are clear competitive pressures on food producers and retailers who continually seek product differentiation strategies. At the same time, food production and processing use established sets of consumer concerns. Today, more than ever, buying food with certain guarantees is important for consumers in devel-

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oped countries; companies need to find suitable ways of showing consumers those guarantees. For example, consumers pay attention to food origin (Fernández-Ferrín et al., 2020), food quality (Grunert et al., 2015) or sustainable farming practices for food production (Berg et al., 2017). It is therefore increasingly common for companies to use certifications – such as regional product, sustainable product, fair trade product, retailer-owned, etc. – or even to improve their private labels. The regulatory and legal requirements that ensure products have labels and/or certifications also have a marketing purpose that is linked to the trust and credibility that consumers place in the products which include them. All these factors are a sign of product quality and an indicator of factors that influence consumers' choice behaviors (Carter and Cachelin, 2019). For instance, sustainable labels or certifications influence consumers' purchase decisions about sustainable products (Prell et al., 2020). A label or certification mark provides inherent information about a product, which helps consumers to decide whether to purchase that product even without knowing the brand or the producing company. That is, certification marks and labels reduce the information asymmetry or uncertainty in the buyer–seller or consumer–producer relationship (Nikolaou and Kazantzidis, 2016; Wang et al., 2020). This is because consumers are unaware of much of the information that is generated from generated from a product's development until it reaches their hands, especially in a progressively more complex global food system. Certifications as well as careful labeling ultimately increase consumer confidence in a product or brand and influence consumer purchase intention. However, the question about food products that do not have a certification mark needs to be addressed. It is well known that many products on the market lack specific labeling and more often brand certification. Understanding when and how consumers intend to buy these products is very important to the industry, and CSR can be the starting point for this.

CSR practices between companies have been gaining attention, but little is known about their contingent effects. The academic literature has seldom examined the effectiveness of CSR perceptions to jointly generate consumers credibility and trust attitudes, and thus when and how consumers become engaged with CSR perceptions as signals of "information" or "quality" is poorly understood. Earlier studies have mainly focused on the effects of CSR practices and consumer satisfaction, loyalty and other direct attitudes and behaviors. However, little importance has been placed on how consumers' CSR perception can influence consumers' perceptions of product and brand reliability. To fill this gap the current study explores consumers' CSR perceptions and the influence they have on company credibility and consumer trust in that company – both are identified as mechanisms through which consumers' CSR perception can lead to their intention to buy a company's food products. This study specifically examines the mediating effects of consumers' assessment of a company's credibility, and of consumers' feeling of trust.

However, it is also well known that consumer behavior is influenced by other factors; consumer virtues that may make certain company behaviors more appealing could play a significant role. Researchers have looked at virtues in terms of attitudes and behaviors related to psychology and moral fields but less so in terms of CSR and consumer behavior. Some studies demonstrate certain virtues may exert a positive influence on consumer attitudes and food choice (Arbit et al., 2017) or on behaviors toward CSR (Castro-González et al., 2019). Academic knowledge about those effects is nevertheless limited and incipient.

Although most of the existing CSR and consumer literature has focused on direct evidence of the effects of this type of practice, this exploratory study's novel contribution is to propose that consumers' CSR perceptions are a source of credibility for food companies while generating the necessary trust in a company and its products. This is observed most strongly in consumers with high integrity values, which will ultimately influence their intention to buy those food products.

This study's main objective is to explore and understand whether CSR could be considered as an indirect cue of certain product characteristics. If it could be used as an effective instrument to encourage credibility and trust in a food brand, it could influence consumers' purchase intention. This study also aims to examine how consumer integrity influences the effects of trust and credibility. The research premise is that CSR could be a sign of reliability and expertise while promoting a product's authenticity – it could thus be a source of credibility (Erdem and Swait, 2004) and create trust. In sum, CSR could be used as a tool by companies to demonstrate to consumers that it has the capabilities to work in a certain way and to act as a mechanism to establish credibility and trust. On the other hand, this study seeks to provide new evidence to show that virtues, namely integrity, play a major role in consumer behavior with regard to CSR and food products.

The remainder of the paper is organized as follows. Firstly, the literature review and hypotheses development are presented. The methodology and data collection are stated in the next section, which is then followed by the study's results and discussion. Finally, the conclusions are proposed.

2. Literature review

The underlying conceptual framework for this study investigates (a) the connection between consumers' CSR perception and one outcome variable, namely consumer intention to buy; (b) the mediating role of trust and credibility; and (c) the moderating role of consumer integrity. The review was carried out on the relationship between these constructs.

2.1. CSR perception

Corporate social responsibility refers to "a firm's commitment to maximize long-term economic, societal and environmental well-being through business practices, policies and resources" (Du et al., 2011, p. 1528). These are widespread practices in today's business context in which companies invest more or less according to their capacity and involvement in actions and projects related to the welfare of different stakeholders (Tian et al., 2020), the industry or activity in which they are engaged (Peña Miranda et al., 2019). Evidence over time has shown that it leads to greater competitive advantage and positive economic results for companies (Currás-Pérez et al., 2018). Consumers demand that companies carry out these types of socially responsible practices and, based on them, they value the company, experience attitudes and behaviors, and importantly, make purchasing decisions (Öberseder et al., 2014).

As mentioned above, CSR influences company satisfaction (Barcelos, 2015), identification (Pérez et al., 2013) or loyalty (Mandhachitara and Poolthong, 2011). However, CSR practices could (a) communicate information about a company, its product sustainability and other characteristics to consumers, which would make it easier for them to make decisions; and (b) serve as a consumer cue to reduce uncertainty and drive decision-making. Consumers who show an awareness and trust of CSR record positive attitudes toward a company's products. Hence, knowing how CSR influences consumer perceptions should be a main concern for academics, practitioners, and managers alike because consumer intentions to buy are largely influenced by them.

In addition, most previous studies have considered CSR as a whole, but CSR is a multidimensional construct composed of three dimensions (Alvarado-Herrera et al., 2017): economic, social and environmental. It is therefore important to analyze how the different dimensions of CSR affect consumer purchase intention in rela-

tion to credibility and trust. It appears that there are no studies on how each dimension influences purchase intention; but the importance of considering the dimensionality of CSR is demonstrated by other studies in other fields (e.g., Currás-Pérez et al., 2018).

2.2. CSR perception and intention to buy food products: company credibility and company trust as mediators

Based on the attribution theory, this article aims to comprehend the relationship between food consumers' perception of CSR and their intention to buy food products through their company credibility and company trust.

Intention to buy (or purchase intention) is a widely studied variable in the consumer behavior field. It has been analyzed under the multiple perspectives approach, as a consequence of diverse antecedents in multiple industries and in various contexts. Evidence of this can be found in the various existing meta-analyses (see Guo and Zhou, 2017; Ismagilova et al., 2020; Singhal et al., 2019 as examples). However, it is still essential to analyze the drivers of this variable in the consumer behavior field and to examine its relationship with CSR. Existing studies have found contradictory results (see, for example, Bianchi et al., 2019; Kim, 2017).

Company credibility is defined as "the extent to which consumers feel that the firm has the knowledge or ability to fulfill its claims and whether the firm can be trusted to tell the truth or not" (Newell and Goldsmith, 2001, p. 235). To date, a significant number of studies have analyzed the sources generating credibility among consumers; there are multiple sources of credibility (see Ismagilova et al., 2020 for a review), but most are based on source credibility focusing on one person (i.e., Hussain et al., 2020) or one specific message (i.e., Musgrove et al., 2018). However, fewer studies have focused on analyzing perceptions of the actions taken by a company as a source of credibility.

For instance, consumers will gather data about companies and their products, especially food products, in order to experience company credibility (Kumar and Polonsky, 2019). In many cases, certification marks or other types of labels provide that information to consumers, whose function is to create that credibility in the product that carries them (Atkinson and Rosenthal, 2014). As introduced previously, it is not always possible to have objective information such as that transmitted by certificates, so consumers resort to perceptions. Nonetheless, this is not a disadvantage for companies that cannot certify their food products since, as Lee et al. (2020) suggested, consumers are influenced more by trustworthiness perceptions than by the charm of a certification mark.

Previous literature finds two company credibility dimensions to be trustworthiness and expertness (Tormala et al., 2007). Trustworthiness depends purely on a consumer's capacity to believe, without any investigation or evidence, that a company is honest; expertness is understood as the degree to which a company is considered qualified to carry out tasks with a determined degree of reliability. CSR helps to generate both perceptions – trustworthiness (Devin, 2016; Przepiorka and Horne, 2020) and expertness (Hur et al., 2020) – i.e., CSR is a key factor that engenders consumers' company credibility. The importance of this relationship can also be observed in the literature, although few authors empirically prove it; some such as Hur et al. (2014) demonstrated that CSR perceptions influenced South Korean technology consumers' company credibility, and Jin et al. (2017) also demonstrated that luxury product consumers were similarly influenced. However, there is no evidence concerning this relationship between CSR perceptions and consumers' food company credibility.

In terms of attribution theory, which defines the cognitive processes through which causal judgments are made (Martinko, 1995), consumers infer from a company's and/or brand's behavior, responsibilities, faults or good actions, which conditioned interactions between a company and its consumers. When consumer inferences are positive, they can become a motivating factor in behavior (Rifon et al., 2004). Attribution theory can therefore be useful to justify consumer credibility toward food companies' CSR practices. Consumers who perceive CSR company actions as sustainable, ethical and even philanthropic experience positive perceptions and improved feelings of trustworthiness and expertness toward a company, which provides a good basis for credibility and other positive attitudes (Kim et al., 2017). In other words, those consumers who are aware of and share the values and actions of the CSR practices developed by a company have more credibility toward it (Peterson et al., 2020).

Credibility helps to build a company's, brand's or product's subjective signal (Hur et al., 2014), which in turn contributes to certain consumer attitudes and behaviors. Company credibility plays an essential role in linking consumer CSR perception and consumer company trust. Trust, which is different to trustworthiness (see Alarcon et al., 2018; Bauer, 2019; Hussain et al., 2020; Przepiorka and Horne, 2020 for more information), is defined as "one party's willingness to be vulnerable to another party based on the belief that the latter party is: (a) competent, (b) open, (c) concerned, and (d) reliable" (Mishra, 1996, p. 265), and it influence on the intention to act (Castaldo et al., 2010). For a long time, trust has been identified as a significant factor of consumer–company relationships. Company trust is a feeling related to the intention to accept vulnerability (Hansen et al., 2011) based on the positive expectations that consumers' have about a trusted company's behaviors (Shockley-Zalabak, 2000), which consequently has a definite influence on their behavior. It is therefore remarkable that the concept of trust is composed of two components or elements: reliability and intentionality (Delgado-Ballester et al., 2003). Reliability means that consumers believe that a company or brand will meet with their expectations, and intentionality refers to the consumer belief that a company's intentions are good. Trust has been considered as a key antecedent for positive results in the marketing field (Bozic, 2017). In this sense companies examine practices that can be developed to improve consumer trust.

The current organizational literature also analyzes the trust variable as a consequence of CSR perceptions and, concurrently, as the mechanism by which CSR affects consumer attitudes and behaviors such as satisfaction or loyalty (Islam et al., 2021; Park et al., 2017). When consumers have a positive perception of a food company's CSR practices, they may think about those practices and also about other indirect cues behind that company's products. It is considered that the presence of socially responsible initiatives within an organization transmits signals and ultimately information about the organization's values and ethics; based on these facts, consumers will establish the place reliability in it. CSR is a good way to increase the degree of trust in an organization (Almunawar and Low, 2013), even Pivato et al. (2008) argued that trust is the immediate consequence of CSR.

This study goes one step further and assumes that consumer confidence in food companies and their products is directly affected by their consumers' CSR perceptions. Moreover, the consideration of trust from this double perspective – product and company – responds to the concern of those who agree that the CSR impact on consumer confidence should be further explored, with particular emphasis on the need to incorporate the multiple facets of trust (Park et al., 2014; Perrini et al., 2010). Although not being the main objective of this work, it is a further contribution to the existing literature.

However, despite the previous arguments, there are studies that defend that the relationship between social responsibility actions and trust is not sufficiently proven and that it is conditioned to the occurrence or the existence of certain parallel circumstances and

to the occurrence of other chain reactions that influence behavior (e.g., Martínez and Rodríguez del Bosque, 2015; Simmons and Becker-Olsen, 2006).

On the other hand, as noted above, consumers' company trust is a predictor for positive marketing outcomes, among them, consumers' intentions to buy (Erdem and Swait, 2004). Intention to buy can be understood as the probability that a consumer intends to buy a product (Dodd and Supa, 2011). Consumers who trust a company due to its CSR practices and the feeling of credibility are more likely to buy products from that company (Tian et al., 2011).

Based on the previous arguments, and to fill the gaps found in the literature, this study predicts that food consumers who have a positive perception of CSR practices are more likely to feel company credibility, which in turn increases their company trust and finally influences their intention to buy a company's food products. The influence of CSR perception on the intention to buy is mediated through company credibility and company trust. Consequently, the following hypothesis is postulated:

H1: The three dimensions of consumer corporate social responsibility (a: social, b: environmental, and c: economic) have a positive influence on consumers' intention to buy food products through their food company credibility and trust.

2.3. The moderating effect of integrity

Previous investigations demonstrate that consumer perceptions, attitudes and behaviors are contingent on their personality traits (Hirsh et al., 2012) as well as their virtues or personal values, especially their moral virtues or values (Kim and Drumwright, 2016). Regarding CSR practices, consumers' psychographic features, such as values, are especially important regarding their reactions to those practices (Currás-Pérez et al., 2018). On the other hand, the fact that a consumer trusts a company is strongly associated with several values (Chaudhuri and Holbrook, 2001). Trust is associated with consistency, the behavior of others, competence or skill, fairness, honesty or responsibility, among others (Morgan and Hunt, 1994). It is built on individual values with regard to value-based trust (Hur et al., 2014), and it has much to do with the other party's reliability and integrity. This study explores the moderation effect of integrity in the relationship between company trust and company credibility. Since trust implies belief in the other party's integrity, it must also be influenced by one's own integrity. This premise assumes that moral individuals are driven not only by a sense of duty to do something but also by the ethical nature of the circumstances they face. However, integrity is not only about trustworthiness, it also has a lot to do with credibility. By inferring what Cambier and Poncin (2020) said, credibility guarantees fulfillment and trustworthiness and encompasses credibility.

Palanski and Yammarino (2007) suggested integrity includes consistency in words and actions, consistency in adversity, and moral/ethical behavior, among others. To date, this is not a highly analyzed field; it appears that few studies beyond Castro-González et al. (2019) have considered the moderating intervention of consumers' personal virtues or values, and more specifically, of consumers' integrity. However, in the context of food, the analysis of a brand's integrity and its manufacturing company (Cambier and Poncin, 2020); the supply chain (Ali et al., 2017); or the integrity of certain developments, for example, genetically modified foods (Pascalev, 2003) have been widely supported in the literature.

This study attempts to analyze the moderating effect of integrity on the relationship between CSR and consumer trust and between CSR and consumers' company credibility.

Consequently, the following hypotheses are suggested:

H2: Consumer integrity moderates the effect of consumers' CSR dimensions (a: social, b: environmental, and c: economic) on food company credibility, such that the relationship is stronger when consumer integrity is high than when it is low.

H3: Consumer integrity moderates the effect of consumers' CSR dimensions (a: social, b: environmental, and c: economic) on food company trust, such that the relationship is stronger when consumer integrity is high than when it is low.

Fig. 1 shows the proposed conceptual model.

3. Methods

3.1. Sample

The food industry is vital in today's world market, particularly to the Spanish economy. The food sector is growing daily, and although there are increasingly more foods with certifications, there are still many without that need to be differentiated in some way. For the purposes of this study, consumers who purchase their food products from a Spanish food company in Spain were surveyed; therefore, the data refer to a single context. So, to test the study's hypotheses an exploratory approach was used. This type of method is common for studies with these characteristics (Ojo and Fauzi, 2020; Roy et al., 2018).

The selected company develops CSR practices, and its products do not have any kind of certification. The data for the study were collected via the help of a market research firm at consumers' households based in the same urban location as the selected company, which is where it concentrates most of its production and activity. The market research firm was selected based on two criteria: (1) its knowledge of the geographical area where the study was carried out, and (2) its experience in conducting this type of quantitative study. The data were collected using the random route system as the sampling recruiting procedure. Within the area, homes were selected using the random route system with demographic quotas using gender and age criteria. This method of recruiting has been widely used to conduct personal home surveys as it simplifies making contact with respondents for whom a full record is not obtainable to establish equal selection probabilities (Bauer, 2014). Once the respondents were selected, data collection was conducted through a personal interview through computer-assisted personal surveys (CAPI).

The final sample was composed of 252 consumers who were older than 18 years old and who were responsible for their household purchases. Of the respondents, 57.5% were female; 31.3% were 34 years old or younger; 36.5% were between 34 and 54 years old; and the remaining 32.1% were 55 years old or above. Table 1 presents descriptive sample characteristics.

3.2. Measures

This study's constructs were measured with scales from previous literature, where all indicators were self-reported using a seven-point Likert scale where 1= totally disagree and 7= totally agree. Corporate social responsibility perceptions were measured with a scale which consisted of three dimensions – social, economic and environmental – and a total of 18 items, six for each of the dimensions (Alvarado-Herrera et al., 2017). Trust was measured with a scale of consumer perception of companies' product reliability and companies' actions toward consumers' credibility; the scale consists of six items (Kumar et al., 1995; Swaen and Chumpitaz, 2008). Credibility was measured with a scale of three items related to the company experience and work (Newell and Goldsmith, 2001). Intention to buy was measured with three items (Lin, 2007; Michaelidou and Hassan, 2008). Finally, integrity was measured with a scale which contains two items modified from the work of Palanski and Vogelgesang (2011) and from the scale proposed by Simons et al. (2007).

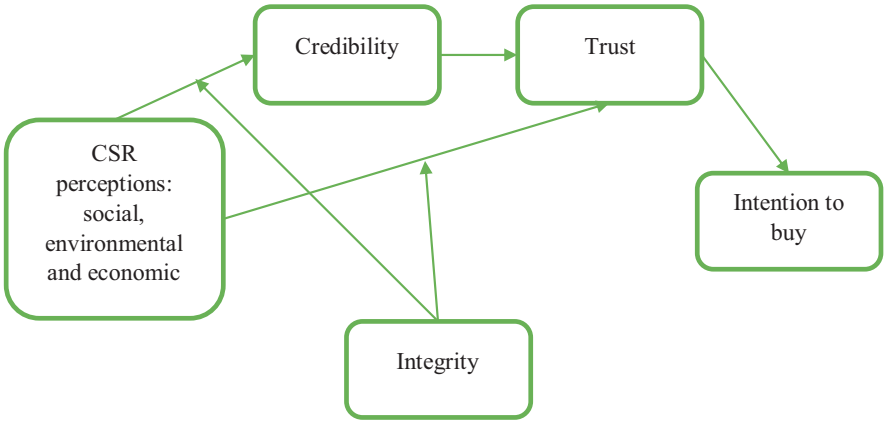

Fig. 1. Proposed model.

Table 1
Demographics of the sample.

Gender	(%)	Age	(%)	Educational level	(%)	Employment	(%)	Relationship of the respondents with the company	(%)
Male	42.5	≤34 years	31.3	Primary education	21	Salaried employees	42.1	No connection whatsoever	64.7
Female	57.5	35-54 years	36.5	Secondary education	17.9	Self-employed	9.5	Worked in the company	5.2
		>55 years	32.1	Technical or vocational education	26.6	Household employees	4.8	Friend or family member working at the company	15.1
				Tertiary education	28.6	Students	8.7	Other kind of relationship	8.3
				No formal education	1.6	Retired people	20.2		
						Unemployed	13.1		

Gender, employment, and previous relationship with the company were used as control variables. Employment indicates whether the respondent was an active worker (employed or self-employed) or not. Previous relationship with the company indicates whether the respondent had any relationship with the company (whether they or a family member had ever worked for the company) or not. The complete list of the measurements, their reliability and validity are shown in Table 2.

3.3. Evaluation of measurement model

AMOS was used to assess the latent variables' properties through a confirmatory factor analysis (CFA). The parameters of the latent construct CFA model were estimated using the maximum likelihood method. Goodness-of-fit indices supported the model: $\chi 2 = 1{,}164.64$ ($p < 0.001$), df= 520, IFI = 0.92, TLI = 0.91, CFI = 0.92, RMSEA = 0.07.

In relation to the scales' convergent validity, all factor loadings were substantial and statistically significant ($p < 0.05$) and provide strong support in favor of the items used to represent the constructs. In terms of reliability, all constructs which were above 0.7 show good composite reliability (Hair et al., 2010). Cronbach's alpha values also demonstrated an adequate reliability for all constructs (Cronbach, 1951). The constructs and their measures show high discriminant validity (Fornell and Larcker, 1981).

Table 3 shows the bivariate correlations of all constructs used in the conceptual model. The correlation assessment demonstrated very robust relations between the indicators.

4. Results and discussion

A conditional process analysis, an "analytical strategy that integrates mediation and moderation analysis with the goal of examining and testing hypotheses about how mechanisms vary as a function of context or individual differences" (Hayes and Rockwood, 2020, p. 19), was performed to test the study's hypotheses. This methodology offers detailed insight into direct, indirect, and moderated effects. Specifically Hayes' (2018) PROCESS Model 84 was used. In this model variable X is CSR perception (CSR-social, CSR-environmental, and CSR-economic), M_1 is credibility, M_2 is trust, Y is intention to buy, and W is consumer integrity. It is a first-stage model in which the integrity variable operates in the first stage of the mediation process, moderating the effect of the CSR dimensions on credibility and trust. To prevent interpretation problems with certain coefficients, due to the non-consideration of zero in some of the measurement scales used, the variables involved in the interaction terms were mean centered.

Table 4 shows the estimation results of this model for the three CSR dimensions. The results of a total effect model are also included to check to what extent the two mediating variables and the moderating variable contribute to the explanation of the dependent variable: intention to buy.

Regarding CSR-social, the first CSR dimension, the analysis' outcomes using ordinary least squares (OLS) demonstrate that consumer CSR-social perceptions positively impact consumers' food company credibility ($\beta_{\text{CSRsocial}\rightarrow\text{credibility}} = 0.10$, $p < 0.01$); credibility positively influences food company trust ($\beta_{\text{credibility}\rightarrow\text{trust}} = 0.90$, $p < 0.01$); and this ultimately impacts intention to buy ($\beta_{\text{trust}\rightarrow\text{intention to buy}} = 1.09$, $p < 0.01$), which supports H_1. CSR-social perceptions also have an impact on trust ($\beta_{\text{CSRsocial}\rightarrow\text{intention to buy}} = 0.24$, $p < 0.01$). The results furthermore reveal that there is no direct effect of consumers' CSR perception on consumer food product purchase intentions, indicating that the effect occurs indirectly.

The results also support H_2, showing that the positive relationship between consumers' CSR perception and their company credibility ($\beta = 0.09$, $p < 0.05$) is contingent on consumer integrity. However, the second moderating effect posited in H_3 and referring to the relationship between the social dimension and trust ($\beta = 0.06$, $p = 0.27$) is not supported by the data.

The pick-a-point method (Rogosa, 1980) combined with bootstrapping (Malhotra et al., 2014) was used to test the indirect effects and also the conditional nature of these effects. The results indicate that the social dimension of CSR impacts purchase intention indirectly through two paths (CSR-social ➔ trust ➔ intention to buy and CSR-social ➔ credibility ➔ trust ➔ intention to buy) and that the second of these paths, the one that includes the two me-

Table 2
Measures, factor loadings, reliability, and validity.

Do you know company [Company name]?	Cronbach Alpha	Factor loading	Composite reliability	AVE
CSR Social dimension	0.95		0.95	0.75
In my opinion, regarding society, [Company name] is really…				
… Trying to sponsor educational programs		0.96		
… Trying to sponsor public health programs		0.95		
… Trying to be highly committed to well-defined ethical principles		0.73		
… Trying to sponsor cultural programs		0.91		
… Trying to make financial donations to social causes		0.85		
… Trying to help to improve quality of life in the local community		0.78		
CSR Economic dimension	0.96		0.88	0.55
In my opinion, regarding the environment, [Company name] is really…				
… Trying to sponsor pro-environmental programs		0.73		
… Trying to allocate resources to offer services compatible with the environment		0.84		
… Trying to carry out programs to reduce pollution		0.86		
… Trying to protect the environment		0.74		
… Trying to recycle its waste materials properly		0.63		
… Trying to use only the necessary natural resources		0.61		
CSR Environmental dimension	0.88		0.96	0.78
In my opinion, regarding the economy, [Company name] is really…				
… Trying to maximize profits in order to guarantee its continuity		0.90		
… Trying to build solid relations with its customers to assure its long-term economic success		0.93		
… Trying to continuously improve the quality of the services that they offer		0.96		
… Trying to have a competitive pricing policy		0.96		
… Trying to always improve its financial performance		0.86		
… Trying to do its best to be more productive		0.75		
Credibility	0.73		0.94	0.71
[Company name] has a great amount of experience		0.78		
[Company name] is skilled in what they do		0.88		
[Company name] has great expertise		0.79		
Trust	0.94		0.85	0.66
[Company name] products give me a sense of security		0.84		
I trust the quality of [Company name] products		0.97		
Going with [Company name] products is a quality guarantee		0.92		
[Company name] cares for us (customers)		0.77		
[Company name] treats customers fairly		0.77		
[Company name] is honest with its customers		0.77		
Intention to buy	0.95		0.96	0.88
Next time I want to order this product, it is likely that I will purchase [Company name] products		0.95		
It is likely that I will purchase products from [Company name] again		0.96		
Definitely, I am going to purchase products from [Company name] soon		0.90		
Integrity	0.73		0.74	0.59
I conduct myself by the same values that I talk about		0.85		
When I promise something, you can be certain that it will happen		0.68		

Table 3
Means, standard deviations and correlation coefficients among variables.

	Mean	SD	1	2	3	4	5	6	7	8	9	10
CSR-social	4.63	1.68										
CSR-environmental	4.29	1.59	0.68**									
CSR-economic	5.73	1.09	0.47**	0.58**								
Credibility	6.23	0.80	0.25**	0.36**	0.42**							
Trust	4.83	1.46	0.41**	0.60**	0.63**	0.59**						
Intention to buy	4.44	1.86	0.32**	0.54**	0.59**	0.45**	0.82**					
Integrity	6.56	0.68	0.15*	0.14*	0.28**	0.21**	0.23**	0.21**				
Gender	0.58	0.50	0.10	0.04	0.03	0.10	0.02	0.04	0.08			
Employment	0.52	0.50	0.04	0.03	0.01	-0.08	-0.02	0.04	0.06	-0.11		
Previous relationship with the company	0.65	0.48	-0.02	-0.05	-0.01	-0.03	-0.11	-0.10	0.04	0.05	-0.10	

*p<.05; **p<.01; gender (0: male, 1: female); employment (1: active worker, employed or self-employed; 0: unemployed, housework, student, retired / pensioner); previous relationship with the company (0: Yes; 1: No).

diating variables (credibility and trust), is moderated by integrity. The results indicate that the effect of the CSR social dimension on purchase intention through credibility and trust is greater as the level of consumer integrity increases. When integrity reaches the mean value on the scale (integrity = 6.56), the indirect effect of CSR-social ➔ credibility ➔ trust ➔ intention to buy is equal to 0.10 (Boot LLCI = 0.03; BootULCI = 0.17); and when integrity reaches its maximum value (integrity = 7), the indirect effect is equal to 0.14 (Boot LLCI = 0.06; BootULCI = 0.23). The fact that the confidence intervals for these effects exclude zero supports their existence. The index of moderated mediation, with a confidence interval above zero, provides additional support for these results (see Table 5).

The relationship between consumers' social CSR perception and company credibility is plotted for low and high consumer integrity, following the process proposed by Dawson (2014). Figure 2 confirms these results and shows a slightly greater effect of consumers' CSR perception on their company credibility when integrity is high.

In summary, when considering the social dimension of CSR, the results strongly support the proposed conditional process model, which indicates that consumers' perceptions of social CSR-related

Table 4
Model coefficients for the total and conditional process models.

CSR-social	Total effect model Consequence			Conditional process model Consequences								
	Y (Intention to buy)			M1 (Credibility)			M2 (Trust)			Y (Intention to buy)		
Antecedents	Coeff.	SE	p	Coeff.	SE	p	Coeff.	SE	p	Coeff.	SE	p
Constant	2.92	0.51	<.01	6.21	0.19	<.01	-0.32	0.64	.62	-0.51	0.60	.40
CSR-social	0.35	0.07	<.01	0.10	0.03	<.01	0.24	0.04	<.01	-0.02	0.04	.60
Credibility							0.90	0.09	<.01	-0.10	0.11	.36
Trust										1.09	0.06	<.01
Integrity				0.29	0.08	<.01	0.26	0.12	.03			
CSR x Integrity				0.09	0.04	.02	0.06	0.06	.27			
Gender	0.06	0.23	.80	0.09	0.10	.36	-0.18	0.14	.20	0.14	0.14	.32
Company relationship	0.08	0.22	.71	-0.16	0.10	.10	-0.04	0.14	.78	0.22	0.14	.12
Employment	-0.37	0.23	.12	-0.07	0.10	.49	-0.28	0.15	.05	-0.02	0.14	.89
	R-squared = 0.11; F (4,245) = 7.94; *p-value* <.01			R-squared = 0.11; F (6,245) = 5.91; *p-value* <.01			R-squared = 0.44; F (7,244) = 27.50; *p-value* <.01			R-squared = 0.68; F (6,245) = 85.00; *p-value* <.01		
CSR-environmental	**Total effect model** Consequence			**Conditional process model** Consequences								
	Y (Intention to buy)			M1 (Credibility)			M2 (Trust)			Y (Intention to buy)		
Antecedents	Coeff.	SE	p	Coeff.	SE	p	Coeff.	SE	p	Coeff.	SE	p
Constant	1.76	0.46	<.01	6.18	0.18	<.01	0.58	0.59	.33	-0.13	0.62	.84
CSR-environ.	0.63	0.06	<.01	0.17	0.03	<.01	0.40	0.04	<.01	0.09	0.05	.10
Credibility							0.74	0.09	<.01	-0.10	0.11	.34
Trust										1.02	0.07	<.01
Integrity				0.23	0.08	<.01	0.24	0.10	.02			
CSR x Integrity				0.05	0.04	.19	0.08	0.06	.17			
Gender	0.09	0.20	.65	0.10	0.09	.28	-0.13	0.13	.31	0.12	0.14	.37
Company relationship	0.09	0.20	.64	-0.16	0.09	.09	-0.07	0.13	.61	0.20	0.14	.14
Employment	-0.29	0.21	.15	-0.05	0.10	.61	-0.25	0.13	.06	-0.03	0.14	.84
	R-squared = 0.30; F (4,245) = 26.47; *p-value* <.01			R-squared = 0.17; F (4,245) = 8.66; *p-value* <.01			R-squared = 0.54; F (7,244) = 40.51; *p-value* <.01			R-squared = 0.68; F (6,245) = 86.26; *p-value* <.01		
CSR-economic	**Total effect model** Consequence			**Conditional process model** Consequences								
	Y (Intention to buy)			M1 (Credibility)			M2 (Trust)			Y (Intention to buy)		
Antecedents	Coeff.	SE	p	Coeff.	SE	p	Coeff.	SE	p	Coeff.	SE	p
Constant	-1.28	0.61	<.01	6.17	0.18	<.01	0.93	0.60	.12	0.19	0.63	.76
CSR-economic	1.00	0.09	<.01	0.29	0.04	<.01	0.63	0.07	<.01	0.21	0.08	.01
Credibility							0.68	0.09	<.01	-0.12	0.10	.25
Trust										0.98	0.07	<.01
Integrity				0.20	0.08	.02	0.24	0.12	.04			
CSR x Integrity				0.08	0.04	.06	0.17	0.06	<.01			
Gender	0.11	0.19	.55	0.12	0.09	.21	-0.09	0.13	.48	0.13	0.14	.35
Company relationship	0.12	0.19	.53	-0.15	0.09	.10	-0.06	0.13	.63	0.20	0.14	.15
Employment	-0.36	0.20	.07	-0.08	0.10	.39	-0.33	0.13	.01	-0.05	0.14	.73
	R-squared = 0.36; F (4,245) = 34.09; *p-value* <.01			R-squared = 0.21; F (6,245) = 10.99; *p-value* <.01			R-squared = 0.55; F (7,244) = 44.33; *p-value* <.01			R-squared = 0.68; F (6,245) = 88.5; *p-value* <.01		

Table 5
Direct and indirect effects of consumer CSR perceptions on intention to buy.

CSR-social				
Unconditional direct effect of CSR-social perceptions on intention to buy				
Direct effect	**SE**	**p**	**LLCI**	**ULCI**
-0.02	0.04	0.60	-0.11	0.06
Conditional indirect effects of CSR-social ➔ Credibility ➔ Intention to buy at values of credibility				
Integrity*	**Indirect effect**	**BootSE**	**BootLLCI**	**BootULCI**
5.88	0.00	0.01	-0.02	0.01
6.56	-0.01	0.01	-0.03	0.02
7.00	-0.01	0.02	-0.05	0.02
Index of moderated mediation				
	Index	**BootSE**	**BootLLCI**	**BootULCI**
Integrity	-0.01	0.01	-0.04	0.01
Conditional indirect effects of CSR-social ➔ Trust ➔ Intention to buy at values of credibility				
Integrity*	**Indirect effect**	**BootSE**	**BootLLCI**	**BootULCI**
5.88	0.21	0.06	0.08	0.33
6.56	0.26	0.05	0.16	0.36
7.00	0.29	0.06	0.17	0.41
Index of moderated mediation				
	Index	**BootSE**	**BootLLCI**	**BootULCI**
Integrity	0.07	0.06	-0.04	0.22
Conditional indirect effects of CSR-social ➔ Credibility ➔ Trust ➔ Intention to buy at values of credibility				
Integrity*	**Indirect effect**	**BootSE**	**BootLLCI**	**BootULCI**
5.88	0.04	0.04	-0.05	0.11
6.56	0.10	0.04	0.03	0.17
7.00	0.14	0.04	0.06	0.23
Index of moderated mediation				
	Index	**BootSE**	**BootLLCI**	**BootULCI**
Integrity	0.09	0.04	0.03	0.19
CSR-environmental				
Unconditional direct effect of CSR- environmental perceptions on intention to buy				
Direct effect	**SE**	**p**	**LLCI**	**ULCI**
0.09	0.05	0.10	-0.02	0.19
Conditional indirect effects of CSR-environmental ➔ Credibility ➔ Intention to buy at values of credibility				
Integrity*	**Indirect effect**	**BootSE**	**BootLLCI**	**BootULCI**
5.88	-0.01	0.01	-0.04	0.02
6.56	-0.02	0.01	-0.05	0.02
7.00	-0.02	0.02	-0.06	0.02
Index of moderated mediation				
	Index	**BootSE**	**BootLLCI**	**BootULCI**
Integrity	-0.01	0.01	-0.03	0.01
Conditional indirect effects of CSR-environmental ➔ Trust ➔ Intention to buy at values of credibility				
Integrity*	**Indirect effect**	**BootSE**	**BootLLCI**	**BootULCI**
5.88	0.35	0.07	0.23	0.48
6.56	0.41	0.06	0.30	0.52
7.00	0.44	0.06	0.32	0.57
Index of moderated mediation				
	Index	**BootSE**	**BootLLCI**	**BootULCI**
Integrity	0.08	0.06	-0.04	0.22
Conditional indirect effects of CSR-environmental ➔ Credibility ➔ Trust ➔ Intention to buy at values of credibility				
Integrity*	**Indirect effect**	**BootSE**	**BootLLCI**	**BootULCI**
5.88	0.10	0.04	0.02	0.18
6.56	0.13	0.03	0.06	0.20
7.00	0.14	0.04	0.08	0.22
Index of moderated mediation				
	Index	**BootSE**	**BootLLCI**	**BootULCI**
Integrity	0.04	0.04	-0.03	0.12
CSR-economic				
Unconditional direct effect of CSR-economic perceptions on intention to buy				
Direct effect	**SE**	**p**	**LLCI**	**ULCI**
0.21	0.08	0.01	0.06	0.37
Conditional indirect effects of CSR-economic ➔ Credibility ➔ Intention to buy at values of credibility				
Integrity*	**Indirect effect**	**BootSE**	**BootLLCI**	**BootULCI**
5.88	-0.03	0.03	-0.09	0.02
6.56	-0.04	0.03	-0.11	0.03
7.00	-0.04	0.04	-0.12	0.03
Index of moderated mediation				
	Index	**BootSE**	**BootLLCI**	**BootULCI**
Integrity	-0.01	0.01	-0.04	0.01
Conditional indirect effects of CSR-economic ➔ Trust ➔ Intention to buy at values of credibility				
Integrity*	**Indirect effect**	**BootSE**	**BootLLCI**	**BootULCI**
5.88	0.50	0.12	0.20	0.67
6.56	0.62	0.09	0.45	0.80
7.00	0.69	0.11	0.52	0.94
Index of moderated mediation				
	Index	**BootSE**	**BootLLCI**	**BootULCI**
Integrity	0.17	0.12	0.08	0.52
Conditional indirect effects of CSR-economic ➔ Credibility ➔ Trust ➔ Intention to buy at values of credibility				
Integrity*	**Indirect effect**	**BootSE**	**BootLLCI**	**BootULCI**
5.88	0.16	0.05	0.08	0.27
6.56	0.20	0.05	0.11	0.30
7.00	0.22	0.06	0.12	0.34
Index of moderated mediation				
	Index	**BootSE**	**BootLLCI**	**BootULCI**
Integrity	**0.05**	**0.04**	**-0.03**	**0.13**

* Integrity values are 1 SD below the mean, the mean, and the maximum.

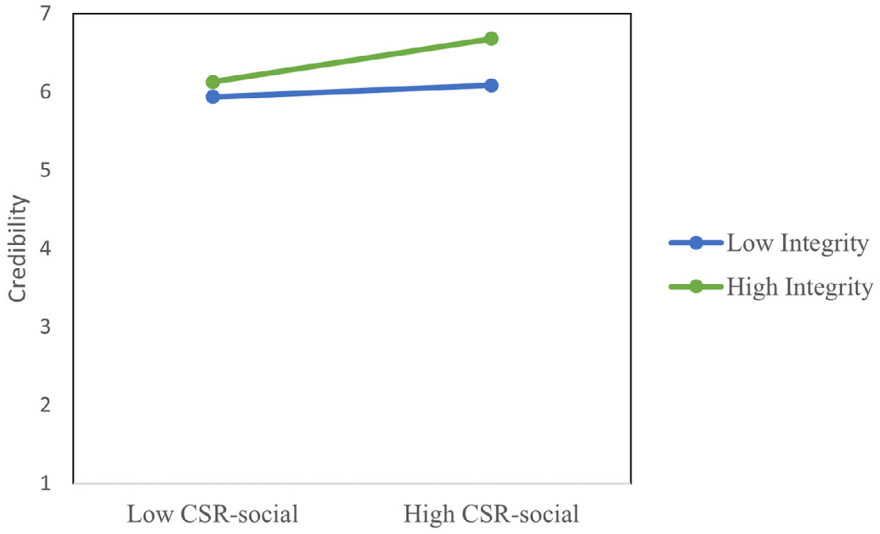

Fig. 2. Conditional effects of consumer CSR- social perception on credibility: two-way interaction effects for unstandardized coefficients.

activities influence their intention to purchase products from the companies that implement them, through increased credibility and trust. Moreover, as consumers' level of integrity increases, so does the effect of social CSR.

When considering the environmental dimension of CSR, the results are similar with respect to the mediating effects. It is again observed that environmental CSR has a positive impact on credibility ($\beta_{\text{CSRenvironmental}\rightarrow\text{credibility}}$= 0.17, p <0.01); credibility positively influences food company trust ($\beta_{\text{credibility}\rightarrow\text{trust}}$= 0.74, p <0.01); and this ultimately impacts intention to buy ($\beta_{\text{trust}\rightarrow\text{intention to buy}}$= 1.02, p <0.01). Similarly, CSR-environmental perceptions have an impact on trust ($\beta_{\text{CSRenvironmental}\rightarrow\text{trust}}$= 0.40, p <0.01), and the absence of a direct effect (CSR-environmental ➔ intention to buy) is observed. Regarding the proposed moderating effects, the data indicate that in the case of the environmental dimension of CSR, consumer integrity does not play a moderating role.

Finally, when testing the conditional process model for the economic dimension of CSR, similar results are observed concerning the mediating effects (see Table 4). Economic CSR perceptions not only have an indirect impact on the intention to buy, through credibility and trust ($\beta_{\text{CSReconomic}\rightarrow\text{credibility}}$= 0.29, p <0.01; $\beta_{\text{credibility}\rightarrow\text{trust}}$ = 0.68, p <0.01; $\beta_{\text{trust}\rightarrow\text{intention to buy}}$= 0.97, p <0.01), but also a direct impact ($\beta_{\text{CSReconomic}\rightarrow\text{intention to buy}}$= 0.63, p <0.01). A moderating effect of integrity on the relationship between credibility and trust is also observed (β= 0.17, p <0.01).

As shown in Table 5, and only for the indirect effect (CSR-economic ➔ reliability ➔ trust ➔ intention to buy), a positive value for the index of moderated mediation positive and a bootstrap confidence interval above zero (0.08, 0.59) were obtained. This represents additional evidence of moderation of the indirect effect. The graph included in Figure 3 confirms this interpretation. It shows a positive slope for the relationship between CSR economic perceptions and trust in the two groups of consumers with low and high integrity, respectively; however, the slope is more pronounced in the second case.

The CSR dimension that seems to have the strongest impact on purchase intention, as can be seen in Table 4, is the economic dimension. The coefficient corresponding to the total effect model for this dimension ($\beta_{\text{CSReconomic}\rightarrow\text{intention to buy}}$= 1.00, p <0.01) is higher than the values observed for the environmental and social dimensions ($\beta_{\text{CSRenvironmental}\rightarrow\text{intention to buy}}$= 0.63, p <0.01); ($\beta_{\text{CSRsocial}\rightarrow\text{intention to buy}}$= 0.35, p <0.01). In addition, regarding the economic dimension, the impact is both direct (CSR-economic ➔ intention to buy) and indirect (CSR-economic ➔ trust ➔ intention to buy and CSR-economic ➔ credibility ➔ trust ➔ intention to buy). All these effects combine and consequently the economic dimension of CSR has a clearer impact on purchase intention (see Table 5).

In summary, the three conditional process analysis results for the three CSR dimensions indicate that: (a) CSR perceptions lead to greater intention to buy from a retailer; (b) credibility and trust are two variables that make this relationship possible; and (c) the indirect effect of CSR perceptions on intention to buy through credibility and trust is stronger when a consumer's integrity increases and when considering the social and economic dimensions.

The results confirm that consumers' CSR perception of food companies tends to infer that those companies are credible and trusted; in turn, the fact that they are credible also makes them more trusted. Finally, when consumers trust a company, they are predisposed to buy its food products. This explains "how the effect occurs". These results are consistent with prior results, which demonstrate similar relationships in another context and independently of each other; for example, Hur et al. (2014) and Jin et al. (2017) demonstrated the influence of CSR on credibility, Almunawar and Low (2013) on trust, and Tian et al. (2011) found a relationship between trust and consumer intention to buy products.

Another relevant finding from this research is the evidence that the effects of CSR perceptions on credibility and trust are more effective among consumers with high integrity values ("when the effect occurs"). Consumers who possess moral values, which are closely linked to the variables involved in the model (such as integrity), are more likely to experience credibility and trust in companies that develop CSR practices than in companies that do not. This is the only study to have found and analyzed this result. It supports the argument that consumers' psychographic features, in this case represented by integrity, correspond to the tendency to trust and believe in a company's socially responsible actions. The findings suggest diverse new insights. Firstly, the analysis supports a mediating sequence between CSR perceptions and consumers' previously unproven purchase intention. As noted above, previous studies have indeed demonstrated the relationship between CSR and credibility, CSR and trust, or CSR and purchase intention, but never in the sequence proposed in this paper. Secondly, the results

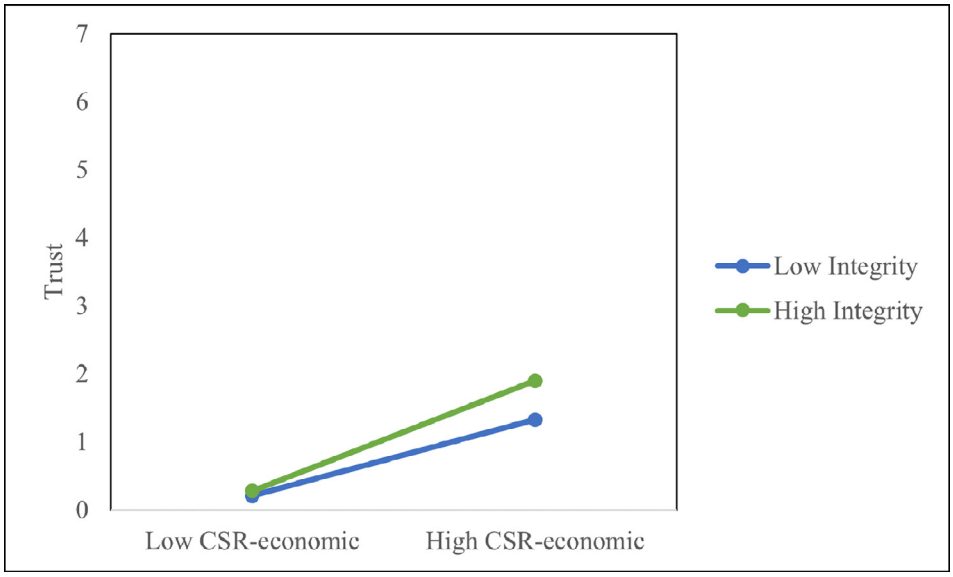

Fig. 3. Conditional effects of consumer CSR-economic perception on trust: two-way interaction effects for unstandardized coefficients.

are contradictory to previous studies, which do show a direct influence (see for example Bianchi et al., 2019; Kim, 2017). This study reveals that there is no direct link between consumers' CSR perception and their intention to buy food products when considering the social and environmental dimensions. These results could be explained by the studies' context. For example, culture factors and values determine consumers' CSR importance and perception (Hur and Kim, 2017), which in turn influence their attitudes and behaviors. Thirdly, trust is measured by combining two variables, that of trust in a company and that of trust in a company's product, which is important when responding to calls to incorporate the multiple facets of trust (Park et al., 2014).

These results have important managerial and policy implications. As evidenced by previous literature, certification has an impact on consumer choice behavior because it acts as a source of credibility (Carter and Cachelin, 2019); however, this study shows that companies that do not have this type of identification should not be concerned because there are other ways to generate credibility and trust in their products. Companies should pay attention to CSR practices, which act as information cues that leverage a positive attitude toward companies' food products. This study's findings demonstrate that these kinds of practices can address consumers' credibility and trust in food companies. This in turn increases their intention to purchase products, which ultimately means increased revenue for those companies. That is, food consumers are more willing to buy products from a socially responsible company or brand.

Nevertheless, it is not a straightforward strategy. This study breaks CSR down into three dimensions and provides companies with comprehensive knowledge about the importance of each one. To influence consumer perceptions, company managers generally must opt for CSR practices that meet several requirements. Firstly, a consumer should feel they can connect with the CSR actions taken (Deng and Xu, 2017). For a consumer to feel identified, it may be important to focus these CSR actions on nearby stakeholders, for example, the local community. Interestingly, the study's findings show the economic dimension of CSR has a greater influence on consumer purchasing intentions than the other dimensions. Nonetheless, the environmental dimension is also important; consumer sensitivity to eco-friendly questions could be the pillar that addresses consumers' food choice. Since food products are involved, actions related to the environment – particularly the local environment – can be especially beneficial in conveying a message. This type of action can more clearly convey how companies proceed and their involvement in production. Secondly, there is a connection between CSR practices and a company's activity and environment, which helps to avoid negative associations.

To achieve results, companies need to concentrate their marketing efforts. Food companies and retailers should be more effective in highlighting their economic engagement with society, their environmental involvement, and the societal implication. They need a good communication strategy on CSR practices to reach consumers (Schoeneborn et al., 2020), which they should use to support their positioning. A good strategy could be, for example, to display information related to this type of practice on product labeling, or at least to show how to easily search information about it. However, companies must be careful when communicating their CSR actions. Under no circumstances should consumers associate this type of practice with image laundering or false actions. To persuade consumers to buy food produced by CSR companies, promotion campaigns should place emphasis on and educate people to appreciate CSR's ensured responsibility and quality. A good strategy would also be to involve consumers in decisions about what actions to take. It has been shown that consumers' experience improves when they are part of a co-creation process (Mubushar et al., 2020), so a similar strategy could be developed in the design of a CSR policy.

Finally, it is important to talk about COVID-19 and the expected challenges for companies regarding CSR. This pandemic situation challenges food companies. Firstly, they must ensure the reliability of the food they manufacture and sell; they must also pay attention to safety in production plants (Duda-Chodak et al., 2020) and retail outlets (Sharma et al., 2020). Their commercial policies may also be affected by the foreseeable economic crisis caused by the health crisis (Borio, 2020). Price will be more important than ever. This is directly linked to the CSR actions carried out by food companies; for example, it is very probable that they will have to intensify their usual food donation campaigns. However, they will also need to proactively engage in many other CSR activities (He and Harris, 2020). It is time for companies to focus on genuine CSR activities. The COVID-19 crisis will accelerate consumer demands that have been made in recent years. Consumers are asking companies for more than the supply of goods or services; they are demanding that companies support society in the face of an

unprecedented and extremely difficult situation. The food industry must pay attention and continue to ensure consumers' company credibility and trust. Even though the long-term consequences of this situation are doubtful, it does have significant implications for understanding consumer buying decisions.

5. Conclusions

This paper seeks to explore how aspects such as CSR practices can be an alternative element to certifications or labels in order to generate credibility and feelings of trust in consumers and, ultimately, influence their decision to buy food products. It additionally investigates whether some consumer characteristics can influence those relationships. Many existing research studies focus on CSR practices and perceptions, but none appear to have considered CSR as an indirect cue to consumers about companies' trustworthiness and expertise, or about companies' product reliability. This research therefore extends the previous research on consumer behavioral intentions in the context of food. It examines the CSR impact on consumers' company evaluation (their credibility and trust in it) wherein such an assessment influences the intention to buy a product. In that respect this work aims to build a framework that draws upon CSR insights as a precursor to food consumers' confidence in credence qualities.

Despite its contributions, this study has certain limitations; future research could continue with the investigative approach used in this study to help highlight the proposed question. Firstly, as mentioned previously, the data refer to a specific location in one country and to a single company. These data are acceptable insofar as it is an exploratory study, but authors should be careful not to generalize the results. Future studies should conduct procurement analyses between companies and different spatial, cultural, and socio-economic contexts. Furthermore, taking into consideration that individuals tend to use shortcuts or approximations when making certain decisions (Payne et al., 1993), it would be interesting to adopt a heuristic approach. It could be used to experimentally study CSR practices as a rule of thumb when searching for a solution in the consumer choice process. In fact, previous literature has identified source credibility as an important heuristic signal (Chaiken and Maheswaran, 1994). In this sense, one of the heuristics that could be applied from the set proposed by Gigerenzer and Todd (1999) is the recognition heuristic that has been successfully related to consumer decision making (i.e., Thoma and Williams, 2013).

Secondly, the investigation has a cross-sectional nature. Upcoming studies should be more aware of the causality of the proposed relationships through longitudinal data. On the other hand, the study has included the virtue of consumer integrity as a moderating variable. Other studies could consider other virtues, analyze them jointly, and consider the inclusion of other aspects such as emotions, or even personality traits such as skepticism.

Declaration of Competing Interest

none.

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