PERCEIVED VALUE OF COFFEE CONSUMPTION: EVIDENCE OF RELIABILITY AND VALIDITY OF THE PERVAL SCALE IN THE PERUVIAN CONTEXT IN TIMES OF PANDEMIC

Elizabeth E. García-Salirrosas, Universidad Nacional Tecnológica de Lima Sur
Ledy Gómez-Bayona, Universidad de San Buenaventura-Medellín
Gustavo Moreno-López, Institución Universitaria Marco Fidel Suarez
Graciela Margot Vejarano García, Universidad Autónoma del Perú
Julia María Marroquín Figueroa, Universidad Autónoma del Chiapas
Jorge Alberto Esponda Pérez, Universidad de Ciencias y Artes de Chiapas

ABSTRACT

The consumer is a key link for the development of agribusiness, so the interest in studying their behavior, on the part of professions and academics, has increased in recent years; With the arrival of covid-19, this field of study is more relevant, considering the new context that has changed certain habits and customs in consumer behavior. The perceived value of a product or service by the consumer plays a fundamental role in people's behavior in relation to their purchase decision.

The objective of this study was to evaluate the reliability and validity of the PERVAL scale in the coffee consumer in the Peruvian market in times of pandemic. Cross-sectional, quantitative approach research was carried out using the survey technique. The sampling was non-probabilistic for convenience, forming a sample that consisted of 428 valid responses. Each of the informants was a coffee consumer that allowed to evaluate the values of coffee consumption as: emotional value, social value, quality of functional value and price of functional value. To assess the reliability and validity of the PERVAL scale, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were used. The results showed that for the application of the PERVAL scale to measure the perceived value of coffee in the Peruvian context, it is necessary to eliminate three items: 2 related to quality and 1 related to social value, with which the scale achieves a good fit.

Keywords: Coffee, Marketing, Coffee Consumption, PERVAL, Scale

INTRODUCTION

Coffee is considered a relevant primary product in the economy of developing countries such as those of Latin America (Infocafe, 2015; International Coffee Organization, 2019). Since time immemorial, coffee has contributed to the economy and lifestyle of the region's inhabitants, reflecting itself in the process of growing, exporting and importing the product.

Peru is one of the largest coffee producers globally, but this is not directly related to consumption by its inhabitants. Therefore, it is relevant to know the perceived value of coffee by Peruvian consumers; However, up to now there is no knowledge of a validated instrument that allows to measure the perceived value in the Peruvian context, for this reason this study aims to evaluate the reliability and validity of the PERVAL scale in the Peruvian context. This instrument will allow evaluating the perceived value of coffee by Peruvian consumers in times of pandemic, which will be useful to interpret their choice and assessment in relation to the quality, emotional, price and social value of the product. A deep understanding will be very useful for the increase of enterprises in the sector, the professional specialists in marketing for

Citation Information: García-Salirrosas, E.E., Gómez-Bayona, L., Moreno-Lopez, G., Vejarano, G.M., Marroquín, J.M., & Esponda, J.A. (2021). Perceived value of coffee consumption: Evidence of reliability and validity of the perval scale in the peruvian context in times of pandemic. *Journal of Management Information and Decision Sciences, 24*(S6), 1-10.

the elaboration of strategies, the coffee entrepreneurs in the increase of the internal demand and for the central government in the decision-making and strategies in the domestic market.

Theory of Consumer Values

Perceived value is a dynamic construct that changes from person to person (Sánchez et al., 2006), in the opinion of Sheth et al., (1991) consumer choice is based on a function of multiple consumption values, more specifically, is based on five dimensions of value: functional, social, emotional, epistemic and conditional. It should be noted that these multiple values combine cognitive and affective dimensions of consumption (Mohd-Any et al., 2015).

Also, according to Sheth et al., (1991) complemented by Lin & Huang, (2012) in addition to the proposal that consumer choice is a function of multiple consumption values, there are two other proposals considered fundamental when addressing the issue of consumption values.

One of them highlights that consumption values make different contributions in any situation of choice ((Lin & Huang, 2012; Sheth et al., 1991), that is, when practically similar products are bought, different values may be involved in the decision-making consumer, while different consumers perceive different values within the same product (Eggert & Ulaga, 2002).

While the other proposition emphasizes that consumption values are independent (Sheth et al., 1991; Lin and Huang, 2012), since the consumer's choice can be determined by a specific value or it can also be determined by several values jointly.

These propositions, through perceived and real value, can predict consumer attitudes and behavior in relation to their purchasing decision making. To complement this claim, they explain that the theory of consumer values can be used to predict consumer behavior, and more than that, this theory can also describe and explain this behavior. Therefore, it is highlighted that this theory can be applied in different categories of products, and has a predictive validity considered excellent in more than 200 situations already analyzed (Chi & Kilduff, 2011; Erdem et al., 1999; Martins et al., 2016).

Which ends up reinforcing the importance of this theory in understanding the factors that influence consumer behavior and highlights the different ones shown below:

Functional Value

Functional value is understood as one of the essential values for the process of choosing a consumer's behavior and can explicitly influence what the consumer's choice will be, further correlated with the physical and utility performance of the product (Sheth et al. ., 1991).

Therefore, in summary, the attributes related to price and quality are the main determinants of rational purchasing behaviors and also consumer preferences. In other words, functional value refers to economic utility, perceived quality, and monetary value, derived from product attributes (Moliner et al., 2007; Candan et al., 2013).

When addressing coffee consumption, this consumption value may be related to the search for caffeine in order to stay awake or even to the consumption of coffees that have a high-quality standard.

Social Value

For social value, Sheth et al., (1991) argue that this value occurs when an alternative is acquired due to its association with one or more specific groups and this association can be negative or positive, that is, it represents the benefits derived from interpersonal or group interactions (Ledden et al., 2007). For this, "social values are studied with terms such as social class, symbolic value, conspicuous consumption, reference groups and opinion leaders" (Candan et al., 2013).

Citation Information: García-Salirrosas, E.E., Gómez-Bayona, L., Moreno-Lopez, G., Vejarano, G.M., Marroquín, J.M., & Esponda, J.A. (2021). Perceived value of coffee consumption: Evidence of reliability and validity of the perval scale in the peruvian context in times of pandemic. *Journal of Management Information and Decision Sciences, 24*(S6), 1-10.

Especially in coffee consumption, the social value of consumption can be observed in the influence of friends or family in the choice of coffee by the individual, or even in the consumption of coffee that makes the individual consider himself inserted in a certain context Social.

Emotional Value

Emotional value is related to the ability of an alternative to awaken feelings or affective states in the individual, therefore, these emotional phenomena can be recognized as components of consumer behavior. in particular, as well as behavior in general (Ledden et al., 2007; Moliner et al., 2007; Richins, 2013).

In addition, these feelings can be precipitated or perpetuated Sheth et al., (1991), that is, emotional values can be related to positive aspects, such as loyalty, nostalgia and emotion or with negative aspects, such as fear, anger and guilt (Candan et al., 2013). As an example, people can consume coffee to relieve stress, feel relaxed, or in search of other affective states.

Epistemic Value

To awaken consumer curiosity and provide news or satisfy a desire for knowledge about products, epistemic value is defined, where this value influences consumer decision-making by referring to this curiosity, novelty and knowledge about certain products. (Sheth et al., 1991; Fandos et al., 2006).

In general, this value is closely related to brands, where consumers who prefer to use new products like to change brands to consume another type of product (Candan et al., 2013). In the case of coffee consumption, we can mention the novelty in relation to the consumption of coffee in capsules to the detriment of the consumption of commonly consumed coffees.

Conditional Value

Finally, the conditional value brings the idea of an alternative that acquires the value of the conditional presence through antecedent physical or social contingencies that increase its functional or social value and, as a result of a specific situation (Sheth et al., 1991) , or even the influence of conditions in the external environment (Candan et al., 2013).

By refining the theory of consumer values, Sweeney & Soutar, (2007) developed a new model to explain the values that influence decision-making in the choices of certain consumers.

Perceived Value Scale (PERVAL)

The Perceived Value Scale (PERVAL) has a relevant importance in the measurement of the value perceived by the consumer, since it allows the empirical test of the multidimensionality of the value construct (Sánchez et al., 2006) and was developed for its application of consumption of durable goods (Sweeney & Soutar, 2007).

In this new model, some values from the previous theory remain, while two other values, the epistemic value and the conditional value, in the opinion of Sweeney & Soutar, (2007) no longer appear as relevant aspects that influence consumer behavior. .

As observed in the PERVAL model, the values of social and emotional consumption have the same characteristics described in the theory of values by Sheth et al., (1991), where the social value corresponds to the "utility derived from the capacity of the product to increase social self-concept "and the emotional value of the" utility derived from the feelings or affective states that a product generates "(Sweeney & Soutar, 2007).

Citation Information: García-Salirrosas, E.E., Gómez-Bayona, L., Moreno-Lopez, G., Vejarano, G.M., Marroquín, J.M., & Esponda, J.A. (2021). Perceived value of coffee consumption: Evidence of reliability and validity of the perval scale in the peruvian context in times of pandemic. *Journal of Management Information and Decision Sciences, 24*(S6), 1-10.

Epistemic and conditional values are not included in the model, because these two values are not applicable, or less important, when buying durable products (Jomehri et al., 2011; Sweeney & Soutar, 2007).

It is worth noting that the functional value, as in the work of Sheth et al., (1991) represents the consumption value taking into account the physical and utility performance of the product. To complement it, it is argued that some consumers perceive value when they pay a low price for a product, while others perceive value when there is a balance between the quality of the product and the price, for this reason, quality and price are aspects and weigh the choice of different consumers (Chen & Dubinsky, 2003).

Therefore, functional value is related to price and also to quality, and these components in Sweeney & Soutar's (2007) view are sub-components of functional value, as shown in Figure 3, where the price of the value functional refers to the "profit derived from the product due to the perceived reduction in its costs in the short and long term". In contrast, the functional quality value represents the "utility derived from the perceived quality and expected performance of the product" (Sweeney & Soutar, 2007).

It should be noted that this model, developed by Sweeney & Soutar, (2007) has a scale with nineteen variables, and the model was tested on consumer durables in Australia. This PERVAL scale has been commonly used in studies related to consumer perceived value and is one of the most effective tools for this type of study (Inouye et al., 2014).

The present research aims to identify the consumption values that influence the consumption of coffee by Peruvians, it should be mentioned that there are few studies that aim to identify the consumption values of agribusiness products and, in particular, the related values with the consumption of coffee in order to understand the perception of the coffee consumer (De Oliveira et al., 2018).

METHOD

The research had a quantitative approach (Hernández et al., 2014), by applying a questionnaire to coffee consumers in the Peruvian context. The questionnaire was based on the studies of Sweeney & Soutar (2007); which was structured with a total of 27 questions distributed as follows: 6 items were related to demographic issues, such as: gender, marital status, age group, educational level, occupation, family income; as well as 2 items related to the frequency and location of coffee consumption. Subsequently, 19 items were raised about perceived values, adapted to the consumption of coffee by Peruvians. The instrument was designed on a 5-point Likert scale, where 1 = Totally disagree and 5 = Totally agree (Dalmoro & Mendes, 2013).

The study corresponds to the basic or pure type, since it consists of an analysis that seeks to generate knowledge for the literature (Bunge, 1985; R. Hernández et al., 2014). It has a descriptive and correlational scope; and with a non-experimental cross-sectional design, in a single moment (Hernández et al., 2014); by applying a questionnaire that measures the perceived value of coffee consumption in the Peruvian context.

According to estimates and projections as of June 30, 2020, the date on which the data was collected; Peru had a population of 32,131,400 inhabitants; This was announced by the National Institute of Statistics and Informatics (INEI). However, there was no information on the exact amount of the population that consumes coffee in Peru, so it is understood as an infinite population.

According to the methodology suggested by Barbetta (2010) and Martins (2014), the first highlights that, for studies related to consumer behavior, the sample must be greater than 400 people, while the second highlights that the minimum number The sample must be 385. In this case, the sample consisted of 428 valid responses. Each of the informants was a coffee consumer who allowed to evaluate the following coffee consumption values: Emotional Value, Social Value, Functional Value Quality and Functional Value Price.

Citation Information: García-Salirrosas, E.E., Gómez-Bayona, L., Moreno-Lopez, G., Vejarano, G.M., Marroquín, J.M., & Esponda, J.A. (2021). Perceived value of coffee consumption: Evidence of reliability and validity of the perval scale in the peruvian context in times of pandemic. *Journal of Management Information and Decision Sciences, 24*(S6), 1-10.

After data collection, the information was processed using the Statistical Package for Social Science (SPSS) V-22.0 and AMOS-24 software, which allowed knowing the perceived value of coffee by the Peruvian consumer.

Adaptation of the Perceived Value Scale (PERVAL)

The questionnaire used in this study was taken from (De Oliveira Camelo et al., 2018a), which was constructed taking into account the studies of (Sweeney & Soutar, 2001) and (Hennigs et al., 2012). The scale was translated into Spanish and then underwent a multi-step revalidation process. First, two of the authors translated the questions into Spanish and then a native speaker with academic training translated them into Portuguese. Finally, the original questions were compared with the back translations to ensure accuracy. The questionnaire consisted of a total of twenty-six questions, six of which were related to demographic issues, such as: gender, marital status, age group, educational level, occupation, and family income. Items related to the frequency and place of coffee consumption were also presented. Subsequently, 19 questions were asked related to the consumption values adapted for the consumption of coffee by Peruvians. To measure each item, the Likert-type scale was applied in a range from 1 to 5 different points, 1 means "totally disagree" and 5 "totally agree" (Dalmoro & Vieira, 2013). The questionnaire was validated by means of a previous test carried out with six coffee consumers who were invited to rate and comment on the questions and their wording. After the evaluations, the questions were better understood, mainly in the semantics of the words, to avoid problems with their interpretation.

The data collection was carried out online, with a questionnaire hosted on the Google platform, according to Teixeira et al. (2009), this medium has positive points such as that the environment does not influence the responses and the cost is considered low.

The survey was conducted between the months of June to September 2020, and 430 responses to the questionnaire were collected from Peruvian coffee consumers, however, 2 responses were eliminated for being incomplete and only a total of 428 were validated, of which represented an adequate sample according to the methodology suggested by Barbetta (2010) and Martins (2014), since the former emphasizes that for a study related to the subject of consumer behavior the sample must be greater than 400 individuals, while the second emphasizes that this number must be at least 385 respondents.

The data analysis process was divided into three stages: in the first stage, the sociodemographic and consumption data were calculated to determine the profile of the surveyed coffee consumers. In the second stage, the structure of the instrument was verified by Exploratory Factor Analysis (EFA) with the main axis factorization extraction method and the Promax rotation method with Kaiser normalization. All the factors had a factorial load above 0.5 for each attribute that was included in its corresponding factor. Confirmatory Factor Analysis (CFA) was also performed, for which the following goodness of fit indices were used, recommended by Mueller and Hancock (2008): The Chi-square coefficient between the degrees of freedom [$\chi 2$ / gl]; the Root Mean Square Error of Approximation [RMSEA], the standardized root mean square residual [SRMR], the index of incremental fit [CFI]. An acceptable fit is considered when the model shows: $\chi 2$ / gl> 3; CFI <.95 and RMSEA> .06 and SRMR <.08 (Browne & Cudeck, 1993; Hu & Bentler, 1999; Tabachnick & Fidell, 2007). Regarding the standardized factor loadings (λ), values greater than 0.5 are considered adequate (Johnson & Stevens, 2001). Likewise, the composite reliability index (IFC) and the mean variance extracted (AVE) were calculated. Acceptable values are those that exceed the minimum recommended thresholds of 0.6 in the IFC and 0.5 in the AVE (Hair, Black, Babin, & Anderson, 1998). Likewise, convergent validity was evaluated by checking that all standardized lambda parameters were significant and greater than 0.5 (Gerbing & Anderson, 1988). Discriminant validity was determined by comparing the square root of the AVE of each construct with the covariance between it and any other in the model, verifying that the shared variance between a

Citation Information: García-Salirrosas, E.E., Gómez-Bayona, L., Moreno-Lopez, G., Vejarano, G.M., Marroquín, J.M., & Esponda, J.A. (2021). Perceived value of coffee consumption: Evidence of reliability and validity of the perval scale in the peruvian context in times of pandemic. *Journal of Management Information and Decision Sciences, 24*(S6), 1-10.

concept and its measures was higher than the shared variance between constructs (Fornell & Larker, 1981).

The calculation of the frequencies of the sociodemographic data of the sample of coffee consumers and as well as the Exploratory Factor Analysis (EFA) was carried out with the support of the statistical software package for social sciences -SPSS v-22; and the confirmatory factor analysis (CFA), the composite reliability (CR) and the mean variance extracted (AVE), the statistical software AMOS was used. To compare the variation of the perceived value with the sociodemographic characteristics, as well as with the consumption behavior,

RESULTS

Regarding the characteristics of the sample of coffee consumers in Peru, which served as the basis for the present study, a certain homogeneity between the male and female is observed, with little superiority for the female, who was represented by 226 respondents, being 52.8%. The relative frequencies of consumers in each of the demographic variables are shown in Table 1.

Table 1
STATISTICAL DESCRIPTION OF THE SAMPLE OF COFFEE CONSUMERS IN PERU (N = 428)

Characteristic	Category	Frequency	%
Gender	Feminine	226	52.8
	Male	202	47.2
Marital status	Married	47	11.0
	Engaged to)	42	9.8
	Divorced	17	4.0
	Single	320	74.8
	Widow	2	0.5
Age groups	under 17 years old	11	2.6
	18 - 23 years old	187	43.7
	24 - 29 years old	132	30.8
	30 - 35 years old	42	9.8
	36 - 41 years old	27	6.3
	42 to more years old	29	6,8
Education level	Doctorate	5	1.2
	master's degree	17	4.0
	College student	225	52.6
	Advanced technician	94	22.0
	High school	81	18.9
	Primary	6	1.4
Occupation	Unemployed	150	35.0
	Private employee	93	21.7
	Public Employee	65	15.2
	Businessman	10	2.3
	Independent worker	110	25.7
Family income	less than 1 minimum wage	78	18.2
	from 1 to 3 Minimum wages	220	51.4
	de 4 a 6 salarios Mínimos	93	21.7
	De 7 Salarios a Más	37	8.6

The percentages are similar to those observed in the study carried out by (Camelo et al., 2018) who found a percentage of 55% for males and 45% for females. The vast majority (74.8%) are "single", only 11% are married. Thus, it is also observed that the majority (74.6%) are in an age range of 18 to 29 years. Regarding the level of education, it was identified that a little more than half (52.6%) were university students in the data collection period. It also stands out that 35.0% were unemployed, 25.8% were independent workers, and 21.7% were private

Citation Information: García-Salirrosas, E.E., Gómez-Bayona, L., Moreno-Lopez, G., Vejarano, G.M., Marroquín, J.M., & Esponda, J.A. (2021). Perceived value of coffee consumption: Evidence of reliability and validity of the perval scale in the peruvian context in times of pandemic. *Journal of Management Information and Decision Sciences, 24*(S6), 1-10.

sector employees. With respect to family income, the most significant is located between 1 to 3 minimum wages (51.4%).

Reliability and validity of the PERVAL scale in coffee consumption in the Peruvian context.

Table 2
EXPLORATORY FACTOR ANALYSIS (EFA) OF THE ITEMS.
PATTERN MATRIX

		Factor			
		1	2	3	4
CA1	Coffee quality influences my coffee choice			.551	
CA2	The quality of the coffee in the different places of choice interferes with my choice of which coffee to drink			.527	
CA3	The coffee I drink has an acceptable quality standard.			.572	
CA4	I constantly make the same coffee choice			.660	
CA5	I will never drink the coffee that many people prefer, unless it meets my quality standards			.612	
EM1	When I'm in a bad mood, I drink coffee to feel better		.581		
EM2	I seek self-satisfaction when I drink coffee		.807		
EM3	I feel relaxed when I drink coffee		.881		
EM4	Drinking coffee makes me feel good		.934		
EM5	Drinking coffee gives me pleasure		.703		
EM6	Drinking coffee reduces my daily stress		.557		
PRE1	The price paid for the coffee I drink is correct				.797
PRE2	The coffee I drink is considered good relative to the price I pay				.654
SO1	Drinking coffee makes me feel more acceptable to others.	.630			
SO2	Drinking coffee will get me noticed by other people	.861			
SO3	Drinking coffee makes a good impression on other people	.980			
SO4	Drinking coffee will give me greater social approval	.898			
SO5	My friends often help me choose which coffee to drink	.911			
SO6	My friends and I usually have the same kind of coffee	.771			

Table 3 presents the EFA, which allows verifying the distribution of the items in 4 factors, for coffee consumption, coinciding with the previous studies, the four factors or dimensions of the PERVAL scale came out to measure the value received. In such a way that factor 1 represents the social value, factor 2 the emotional value, factor 3 the quality value and factor 4 economic value (price).

Table 3
EVALUATION OF THE ORIGINAL MODEL PERVAL SCALE.

Factor Ítem	Lambda Estand.	T -Valor robusto	IFC	AVE	Alfa de Cronbach
CA			0,732	0.354	0,729
CA1	0.575	11.319***			
CA2	0.580	11.436***			
CA3	0.620	12.354***			

Citation Information: García-Salirrosas, E.E., Gómez-Bayona, L., Moreno-Lopez, G., Vejarano, G.M., Marroquín, J.M., & Esponda, J.A. (2021). Perceived value of coffee consumption: Evidence of reliability and validity of the perval scale in the peruvian context in times of pandemic. *Journal of Management Information and Decision Sciences, 24*(S6), 1-10.

CA4	0.599	11.877***			
CA5	0.599	11.868***			
EM			0,906	0.616	0,902
EM1	0.726	16.931***			
EM2	0.760	18.031***			
EM3	0.741	17.408***			
EM4	0.846	21.187***			
EM5	0.835	20.769***			
EM6	0.793	19.210***			
PRE			0,745	0.595	0,743
PRE1	0.816	15.990***			
PRE2	0.723	14.326***			
SO			0,713	0.713	0,936
SO1	0.866	22.362***			
SO2	0.918	24.663***			
SO3	0.904	24.022***			
SO4	0.919	24.717***			
SO5	0.919	19.049***			
SO6	0.780	14.643***			
Goodness of fit measures: $\chi 2$ / gl = 3.619; CFI = 0.923, SRMR = 0.064, RMSEA = 0.078 KEY: CA = Quality, EM = Emotional, PRE = Price, SO = Social, IFC = Composite Reliability Index; AVE = Mean variance extracted, *** p <0.0001, ** p <0.001; * p <0.05					

Table 3 offers the summary statistics where the reliability and validity of the original PERVAL scale are collected and it is observed that the factorial structure reveals satisfactory fit indices $\chi 2$ / gl = 3.619; CFI = 0.923; SRMR = 0.064; SRMR = 0.078. However, the value of the mean variance extracted (AVE) for the quality factor did not comply with the value of 0.5 according to (Hair, Black, Babin, & Anderson, 1998), therefore, adjustments were made to the model original, with which we proceeded to eliminate the items: CA1, CA2 and SO6, thus achieving a better fit of the model.

Table 4
INDICES DE BONDAD DE AJUSTE ESTADÍSTICO DEL PERVAL (N= 428)

Modelos	$\chi 2$ (gl)*	$\chi 2$/gl	SRMR	CFI (IC 90%)	RMSEA
Modelo 1 (original)	528.326(146))	3.619	0.064	0.923	0.078
Modelo 2 (sin ítems CA1, CA2 y SO6)	334.204 (98)	3.41	0.055	0.947	0.074

Table 5
DISCRIMINANT VALIDITY OF THE ADJUSTED PERVAL SCALE (MODEL 2)

	IFC	AVE	Value Quality	Emotional Value	Price value	Social Value
Value Quality	0.672	0.408	0.639			
Emotional Value	0.906	0.616	0.527***	0.785		
Price value	0.746	0.596	0.559***	0.543***	0.772	
Social Value	0.944	0.771	0.277***	0.611***	0.372***	0.878

Note: In italics on the diagonal, the square root of the AVE is shown. The figures below the diagonal represent the correlations. For the calculation of the correlation coefficients, the mean of the scores of the indicators of each of the latent factors is used.

Citation Information: García-Salirrosas, E.E., Gómez-Bayona, L., Moreno-Lopez, G., Vejarano, G.M., Marroquín, J.M., & Esponda, J.A. (2021). Perceived value of coffee consumption: Evidence of reliability and validity of the perval scale in the peruvian context in times of pandemic. *Journal of Management Information and Decision Sciences, 24*(S6), 1-10.

Table 5 shows the adjustment of the PERVAL scale and it is observed that the AVE of the quality value improves substantially, however, it does not reach 0.5 according to (Hair, Black, Babin, & Anderson, 1998). However, what is specified by (Malhotra & Dash, 2011) can be taken into account, who argue that AVE is often too strict and that reliability can only be established through IFC. In this sense, it can be affirmed that the adjusted model of the PERVAL scale is adequate to measure the perceived value of coffee consumption in the Peruvian context.

DISCUSSION AND CONCLUSIONS

As far as is known, this is the first study published on the evidence of validity and reliability of PERVAL in Peru. Considering the implication that the perceived value on the consumption of products has for society, in this case the consumption of coffee, it is essential to obtain a valid and reliable measure that allows this variable to be correctly valued. Based on the absence of local instruments aimed at measuring the perceived value of coffee for the Peruvian consumer, the validation and reliability of the PERVAL scale was carried out. Although various studies reported PERVAL as a valid and reliable instrument to measure the perception of value (Mohd-Any et al., 2015) (Akkaya, 2021) (Sweeney & Soutar, 2001), it remained to evaluate the fit of the model found in a different sample as is the case of Peruvian consumers. The results support this model and confirm the dimensions corresponding to the PERVAL scale. Although at first the data did not fit the proposed model, the model was re-specified and after eliminating three items, a model was obtained that presented adequate values in the four adjustment factors analyzed.

Likewise, it can be affirmed that there are not many studies that account for the perceived value of coffee by the Peruvian consumer, even in other parts of the world, so far only one study carried out in Brazil by (De Oliveira Camelo et al., 2018b is known)), According to the approach of the study, the behavior of the factors of the perception of value of coffee (dependent variable) by the Peruvian consumer, associated with gender (independent variables) are observed. Offering useful information in relation to the nature of the analyzed phenomenon, from which the recommendations and future lines of research are derived in aspects of the adequate consumption of coffee in different population groups and the strategies that can be implemented in organizations to potentiate the coffee product and the possible derivatives that may arise, in this way the greatest satisfaction will be achieved not only in organizational management and product portfolios, but also in customer loyalty and retention.

It is concluded that the rhetorical recognition of the perceived value allows to establish that it is situated as a key variable in the consumption of goods and is identified as a multidimensional construct, which not only includes the traditional way of measuring it based on utility economic, but involves other dimensions such as quality, emotional value, social value and the price of functional value.

It is concluded that studies such as these allow not only to identify consumer behavior, but also to know trends in tastes, desires and preferences that support the diversification of the portfolio of coffee products, seeking not only customer satisfaction, but also the sustainability of companies in the sector.

REFERENCES

Akkaya, M. (2021). Understanding the impacts of lifestyle segmentation & perceived value on brand purchase intention: An empirical study in different product categories. *European Research on Management and Business Economics, 27*(3), 100155.

Bunge, M. (1985). La Investigación Científica. In Colección Convivium ARIEL.

Camelo, C.D.O., Thomé, K.M., & Junqueira, A.M.R. (2018). Café e valores de consumo dos brasileiros. *Revista Brasileira de Marketing, 17*(2), 220–236.

Citation Information: García-Salirrosas, E.E., Gómez-Bayona, L., Moreno-Lopez, G., Vejarano, G.M., Marroquín, J.M., & Esponda, J.A. (2021). Perceived value of coffee consumption: Evidence of reliability and validity of the perval scale in the peruvian context in times of pandemic. *Journal of Management Information and Decision Sciences, 24*(S6), 1-10.

Candan, B., Ünal, S., & Erciş, A. (2013). Analysing the relationship between consumption values and brand loyalty of young people: A study on personal care products. *Management, 29*(January), 46.

Chen, Z., & Dubinsky, A.J. (2003). A conceptual model of perceived customer value in E-commerce: A preliminary investigation. *Psychology and Marketing, 20*(4), 323–347.

Chi, T., & Kilduff, P.P.D. (2011). Understanding consumer perceived value of casual sportswear: An empirical study. *Journal of Retailing and Consumer Services, 18*(5), 422–429.

Dalmoro, M., & Mendes, K. (2013). Dilemas na construção de escalas tipo likert: O número de itens e a disposição influenciam nos resultados? *Revista Gestão Organizacional, 6*, 161–174.

De Oliveira, C., Marini, K., & Resende, A.M. (2018). Café e Valores de Consumo dos Brasileiros. *Revista Brasileira de Marketing, 17*(2), 220–236.

De Oliveira Camelo, C., Thomé, K.M., & Junqueira, A.M.R. (2018a). Coffee and the consumer values of the brazilians. *Revista Brasileira de Marketing, 17*(2), 220–236.

De Oliveira Camelo, C., Thomé, K.M., & Junqueira, A.M.R. (2018b). Coffee and the consumer values of the brazilians. *Revista Brasileira de Marketing, 17*(2), 220–236.

Eggert, A., & Ulaga, W. (2002). Customer perceived value: A substitute for satisfaction in business markets? *Journal of Business & Industrial Marketing, 17*(2–3), 107–118.

Erdem, O., Oumlil, A., & Tuncalp, S. (1999). Consumer values and the importance of store attributes. International *Journal of Retail & Distribution Management, 27*(4), 137–144.

Fandos, J., Sanchez, J., Moliner, M., & Llorens, J. (2006). Customer perceived value in banking services. *International Journal of Bank Marketing, 24*(5), 266–283.

Hennigs, N., Wiedmann, K.P., Klarmann, C., Strehlau, S., Godey, B., Pederzoli, D., … & Oh, H. (2012). What is the value of luxury? A cross-cultural consumer perspective. *Psychology and Marketing, 29*(12), 1018–1034.

Hernández, R., Carlos, F., & Baptista, P. (2014). Metodología de la investigación (Sexta edic). Mc Graw Hill Education.

Infocafe. (2015). Principales productores de café del mundo. In El café, 1.

Inouye, S., Chi, T., & Bradley, L. (2014). Consumer perceived values of Hawaiian attire: The effects of socio-demographic factors. *Journal of Fashion Marketing and Management, 18*(4), 507–524.

Jomehri, N., Javanshir, H., & Ebrahim, S. (2011). An empirical study to determine the critical success factors on customer retention: A case study of Iranian banking sector. *Management Science Letters, 1*(2), 223–234.

Ledden, L., Kalafatis, S.P., & Samouel, P. (2007). The relationship between personal values and perceived value of education. *Journal of Business Research, 60*(9), 965–974.

Lin, P.C., & Huang, Y.H. (2012). The influence factors on choice behavior regarding green products based on the theory of consumption values. *Journal of Cleaner Production, 22*(1), 11–18.

Malhotra, N.K., & Dash, S. (2011). Marketing Research: An Applied Orientation. *In Journal of Marketing Research, 31*(1), Pearson Publishing.

Martins, H., Ferreira, T., & Miranda, G. (2016). Green buying behavior and the theory of consumption values: A fuzzy-set approach. *Journal of Business Research, 69*(4), 1484–1491.

Mohd-Any, A.A., Winklhofer, H., & Ennew, C. (2015). Measuring users' value experience on a travel website (e-Value): What value is cocreated by the user? *Journal of Travel Research, 54*(4), 496–510.

Moliner, M.A., Sánchez, J., Rodríguez, R.M., & Callarisa, L. (2007). Relationship quality with a travel agency: The influence of the postpurchase perceived value of a tourism package. *Tourism and Hospitality Research, 7*(4), 194–211.

Organización Internacional del Café. (2019). Historia del café. International Coffee Organization.

Richins, M.L. (2013). Measuring emotions in the consumption experience. *Journal of Consumer Research, 24*(2), 127–146.

Sánchez, J., Callarisa, L., Rodríguez, R.M., & Moliner, M.A. (2006). Perceived value of the purchase of a tourism product. *Tourism Management, 27*(3), 394–409.

Sheth, J.N., Newman, B.I., & Gross, B.L. (1991). Why we buy what we buy: A theory of consumption values: Discovery service for air force institute of technology. *Journal of Business Research, 22*(2), 159–170.

Sweeney, J., & Soutar, G. (2001). Customer perceived value: The development of a multiple item scale. *Journal of Retailing, 5*(3), 203–220.

Sweeney, J., & Soutar, G. (2007). Customer perceived value: The development of a multiple item scale in hospitals. *Problems and Perspectives in Management, 5*(3), 252–268.

Carland, J.W., Hoy, F., Boulton, W.R. & Carland, J.A. (1984). Differentiating entrepreneurs from small business owners. *Academy of Management Review, 9*(2), 354-359.

Citation Information: García-Salirrosas, E.E., Gómez-Bayona, L., Moreno-Lopez, G., Vejarano, G.M., Marroquín, J.M., & Esponda, J.A. (2021). Perceived value of coffee consumption: Evidence of reliability and validity of the perval scale in the peruvian context in times of pandemic. *Journal of Management Information and Decision Sciences, 24*(S6), 1-10.