

Article



You Are What You Eat: The Relationship between Values and Organic Food Consumption

Manuela Vega-Zamora *^D, Manuel Parras-Rosa and Francisco José Torres-Ruiz^D

Campus Las Lagunillas s/n, University of Jaén, 23071 Jaén, Spain; mparras@ujaen.es (M.P.-R.); ftorres@ujaen.es (F.J.T.-R.)

* Correspondence: mvega@ujaen.es; Tel.: +34-953-213-314

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Abstract: In current times, the man-made problems affecting our planet (climate change, loss of biodiversity, etc.) are making an urgent case for shifting towards a more sustainable kind of consumption. One of the ways these problems can be addressed is to promote organic agriculture, which means boosting levels of organic food consumption. This study examines the relationship between the number of organic foods consumed and the specific values that consumers look for in foods, in order to deepen the current knowledge regarding the behaviour of the organic food consumer. To this end, data was analysed from a face-to-face survey of 776 people in Spain through bivariate analysis techniques. Results show that organic food consumers have a different pattern of values from non-consumers and a greater level of involvement with food in general. Moreover, within the group of organic consumers, the effect of values on the quantity or variety of foods consumed is not as marked, although there are differences in favour of those that consume more frequently. Lastly, the main implication of the results obtained is that, in order to increase consumption, selfish values should be connected with altruistic ones. For this reason, instilling a specific value based on the term or concept "life" is proposed.

Keywords: organic foods; consumer behaviour; values; level of consumption; sustainable consumption

1. Introduction

Recent years have seen a shift in the buying and consumption habits of a growing number of consumers who are increasingly opting for more sustainable products, in response to the growing concern over man's impacts on the planet [1,2]. Perhaps the most disturbing of these is climate change, with its potentially devastating consequences for the environment, economy, society [3–6] and even human health [7–9], which are already being noted and are set to become ever more severe.

Given this scenario, within the realm of agriculture's impact on the planet, the role of organic agriculture should be highlighted as one of the more sustainable forms of production that can help to mitigate climate change [10]. Indeed, the greater awareness of consumers regarding the consequences of climate change and the scarcity of natural resources [11], their growing concern for health and food safety, given recent food scandals [12,13], and their perception of organic foods as being natural, healthy, safe, environmentally friendly, etc. [13–18] have made buying organic look like a good option for sustainable consumption.

Nonetheless, after several decades of research since organic foods first entered the market, the reality is that the changes in buying and consumption habits are coming about too slowly to allow organic agriculture to play its part in helping to mitigate the impact of man on the environment. The key question is: how do we accelerate the change in the consumption of organic foods?

From a marketing perspective, multiple studies have been conducted in order to understand and explain organic food-related behaviour, as a basis for adopting effective strategies to increase demand.

Thus, there are plenty of studies that make use of psychographic and demographic characteristics as descriptive and explanatory factors, such as values, perceptions, attitudes, level of knowledge, age, sex, education level, etc. ([19–24], among the most recent studies). Some typologies or consumer segmentation studies [22,25–29] and consumer behaviour models are also common [30–35].

In the face of such a plurality of papers, food products analysed (each study generally focuses on one food, or two or three at most—see, for example, Chen et al. [30], Guney et al. [36], Kaygisiz et al. [37]), explanatory variables considered and the general lack of consensus on the key factors to increase consumption, what is missing is an effort to synthesize or establish a general model that can be applied universally and allow us to draw global conclusions, to help steer strategies to generate demand. In this regard, there are several questions of interest related to the problem that have not yet been addressed in the literature and that may be useful in explaining different behaviours. For example, what is an organic consumer? Is an organic food consumer someone that consumes more than one organic food product, or is one enough? If someone occasionally consumes an organic food, can they be considered to belong to the same segment as those who regularly consume several organic foods? To what extent is the variety and frequency of organic foods consumed related to, or indicative of, different consumption patterns? What are these variables related to?

On another note, perhaps the two clearest conclusions that can be drawn from the extensive literature on food consumer behaviour are, firstly, its complexity, and, secondly, the importance of values. Instead of a routine shopping process, it is now considered to be a complex process with a high degree of consumer involvement that varies considerably according to the situation and the product [38]. Thus, to the usual influencing factors, such as personality, values, motivations, sociodemographic characteristics, situation of consumption, social interaction, product attributes, etc. [39], we must add those associated with new social concerns and with the conviction that the consumption of food products has a bearing on, or is related to, these concerns [40,41]. This relationship perceived by consumers can serve to determine or isolate a factor that may be key to explaining food-related consumer behaviour: values.

Values are described as beliefs about desirable behaviours that guide the selection or evaluation of behaviour and are ordered by relative importance [42]. Once a value is internalized, it becomes a standard or criterion for guiding actions and for developing and maintaining attitudes towards relevant objects and situations. Values therefore act as an important guide in consumers' lives, determining their consumer behaviour and choices [43,44]. The more consistent or coherent the valuation of the attributes of a product with the values or interests of the individual, the more favourable the individual's attitude will be towards that product and the greater the chance they will choose to purchase it [45]. A product is truly relevant when it contributes to the fulfilment of the consumer's values [46]. The personal interests of individuals play a part in establishing personal food choice criteria through the values they hold. These values consist of sensory perceptions, monetary considerations, health and nutrition beliefs, convenience, and so on [47,48].

In this regard, the growing amount of information on food products, their production processes and their consequences has given rise to new values over recent decades [49–51] and to a greater awareness or knowledge of the consequences of our acts of consumption. In other words, this additional information we now have as consumers about the effects of consuming each product on health, climate change, pollution, overexploitation of resources, society, etc., is contributing, to a certain degree, to a more sustainable—or at least more aware—kind of consumption [51–53]. Information has increased the role of values in consumption [54], given that we can no longer plead ignorance to justify certain behaviours.

All this leads to the assumption that consumers value specific aspects when shopping, according to their functional problems and their symbolic and hedonistic profile, and these values are determinants in their behaviour [55,56]. In the context of organic foods (which are similar to their conventional equivalent in appearance, flavour, etc. and can only be distinguished by the label), it seems clear that

consumption is heavily influenced by this profile, to the extent that consumption can be interpreted as a form of self-expression of values related to the consumer's problems [17,28,57–59].

The consideration of values in a food context is not new. Some authors [60,61] defend their use, due to their stability, as a construct to measure the preferences of consumers with regard to food products. The studies of Sparks et al. [62], Grunert and Juhl [63] and Povey et al. [64] provide empirical evidence of the capacity of values to predict the consumption of foods and their direct influence on choosing them [65,66].

Given that previous studies do not go into depth on the number or variety of organic foods consumed and the role of values as a central explanatory factor of consumption, this study attempts to complete the current knowledge on the behaviour of organic foods consumed and the configuration of values. To be precise, on a functional level the aim is to: (1) analyse whether the configuration of the values of non-consumers of organic foods consumers), the number of products consumed or the intensity (frequency) of consumption reflects different configurations of values. On an implicit level, the underlying question is whether organic consumption is on a gradual sliding scale or whether the different possible stages involve radical changes in the consumer.

2. Materials and Methods

2.1. Data Collection

The instrument used to collect the data required to fulfil the research objectives was a structured questionnaire conducted through face-to-face interviews using a PDA. Six geographically dispersed cities in Spain were selected (Madrid, Barcelona, Seville, Salamanca, Oviedo and Valencia). A market research company with its own field network was contracted to carry out the field work simultaneously in all six cities. Under the authors' supervision, this company was responsible for programming the PDAs, conducting all the interviews and creating the data files. The interviewers selected the sample population in the street (on a 1:3 ratio basis, using a random number table) and the interview lasted about 20 min, as there were also other consumer behaviour questions in the survey that fell outside the research objectives of this paper.

The study population was defined as a group of consumers responsible for food shopping, aged 25 to 65, with quotas for education level (50% of the sample were university-educated), sex (60% were women) and age (50% were aged 35 or under), given the likely influence of these variables in organic food purchasing behaviour as described in previous studies [67–72]. The complete sampling process is summarized in Table 1.

Scope	National, Spain			
Target	Urban buyers, aged 25–65			
Type of Interview	Personal interview, in the street, with a PDA, using a structured questionnaire. People randomly selected in 10 different places in each city.			
Sample Size	776 valid cases			
Sample Distribution	Madrid (128 cases), Barcelona (128 cases), Seville (132 cases), Salamanca (131 cases), Oviedo (132 cases), Valencia (125 cases)			
Type of Sample	Random. Restricted by age, gender and education level.			
Sample Error	For global data, $p = q = 0.5$ and $k = 1.96$, the sample error is $\pm 3.5\%$.			

Table 1. Sample.

2.2. Measurement

The interviewees' food values were measured by a 5-category scale on which they rated the level of importance they attribute to each item. Each item collects an opinion, perception or manifestation regarding a specific food-related value. The definition of the different items was not only based on a previous qualitative study conducted with discussion groups [17], but also inspired by many other scales that measure attitudes, perceptions, knowledge, behaviour, values, importance and awareness of food-related aspects in general, and organic food in particular, such as health, environment, diet, lifestyle, food safety, nutrition, quality, ethical motivations and choosing and/or buying food products [60,73–93]. Lastly, from a methodological standpoint, it should be stressed that the specific values of the consumers were measured in an indirect manner. Thus, any reference to these values in the following sections should be understood to refer to opinions regarding them.

Furthermore, interviewees were asked to select one of the following options: I've never tried it; I've tried it but I don't consume it; I consume it once or twice a month; I consume it more frequently, for each of the products included: 1. Organic virgin olive oil; 2. Organic vegetables; 3. Organic fruit; 4. Organic dairy (milk, yoghurt, cheese, curd); 5. Organic meat; 6. Organic bread; 7. Organic processed products (honey, cereals, pâté, precooked meals); 8. Organic juices; 9. Organic wine. This information was used to determine the number of organic products consumed and estimate their consumption frequency or intensity.

2.3. Data Analysis

In order to explain organic food consumption through specific values, the data were analysed using the IBM SPSS Statistic 26.0. software package to determine the relationship between the number—in terms of variety—of organic foods consumed and consumers' responses to a series of statements related to specific values on the subject of food and diet in general. Due to the ordinal nature of the responses on specific values, two tests were used that are widely known and employed for this type of data: the Mann–Whitney U test, to compare between groups, and Kendall's Tau-b coefficient, to study the relationship between the specific values and the number of products consumed (For a more in-depth understanding of these tests see Mann and Whitney [94] and Kendall [95]).

3. Results and Discussion

In the first phase, the data were compared to find out if there are differences between the patterns of values of organic food consumers and non-consumers, in order to determine whether, as anticipated, the consumption of organic food is heavily influenced by its symbolic nature. In this scenario, one would expect to find that behaviour differs between the two groups. Table 2 shows the results of the Mann–Whitney U test, in which the two consumer groups' scores for each item are compared. The clearest result is that only 3 of the 20 items (Items 7, 8 and 13) showed no significant differences. Thus, the first important conclusion to be drawn from this is that the assumption or hypothesis of this study—on the central importance of specific food-related values in explaining organic food consumption—is sound, which is in keeping with other previous studies [33,34,57,58]. The analysis of the importance of each item in the two groups, for the items in which significant differences were found, returned coherent results that completed the previous information. Firstly, in all the items—except for 15, 16, 17 and 20—the organic consumer group showed a higher average range than the non-consumer group, indicating a profile of greater solidarity, consistent with social projection, altruism, protecting the environment, etc. [50,96]. They also expressed greater concern for, or commitment to, health and food safety, in keeping with arguments found in the literature, in which selfish motives play a strong role in explaining organic food consumption [17,19,35,37,97,98].

For items 15, 16, 17 and 20, the scores are lower in the organic consumer group, indicating that this group is more willing to assume a greater cost-time, money, inconvenience, etc. In this regard, many studies have highlighted a greater predisposition to pay more for organic foods [36,50,99].

Moreover, also in keeping with this result, there is evidence that for the most regular organic consumers, the perception of the added costs in buying this type of food does not affect their buying behaviour, as they are willing to take them on [21].

Items For Me (1: Not Important at All–5: Very Important)	Type of Consumer	Average Range	Mann–Whitney U Test	Asymptotic Sig. (Two-Sided)	
choosing foods based on having a healthy and balanced	Non-consumer	369.30	E4 (01 E00		
diet is	Consumer	430.35	- 54,691.500	0.000	
eating particular foods that help to prevent diseases	Non-consumer	377.18	F0 002 000	0.030	
is	Consumer	413.18	- 58,883.000		
choosing products/foods based on whether the	Non-consumer	364.31	E2 027 000	0.000	
containers, leftovers, etc. can be recycled is	Consumer	441.23	- 52,037.000		
choosing foods that are not produced in a way that	Non-consumer	364.91	E2 2E4 000	0.000	
harms the environment is	Consumer	439.93	- 52,354.000		
eating real, natural, non-precooked, unprocessed food	Non-consumer	365.40	52 616 000	0.000	
is	Consumer	438.86		0.000	
eating safe food, with guaranteed safety and hygiene	Non-consumer	374.80	E7 614 000		
standards is	Consumer	418.38	- 57,614.000	0.005	
eating evolutive special select foods is	Non-consumer	378.22	E0 427 E00		
eating exclusive, special, select roous is	Consumer	410.90	- 59,437.500	0.051	
buying foods that help control my weight and improve	Non-consumer	385.10	(2,002,000		
my physical appearance is	Consumer	395.92	- 63,093.000	0.516	
making special dishes and inviting my friends over for	Non-consumer	369.52	54 805 000	0.000	
lunch or dinner is	Consumer	429.89	_ 34,005.000	0.000	
buying products because they contribute to rural	Non-consumer	364.03		0.000	
development, through increasing income for farmers, creating more jobs, etc., is	Consumer	441.85	- 51,887.500		
buying products of a higher quality (taste smell aspect	Non-consumer	367.13			
texture) despite their higher price is	Consumer	435.09	- 53,536.500	0.000	
choosing products with the fewest possible additives	Non-consumer	365.20		0.000	
(preservatives, colouring and others) is	Consumer	439.31	- 52,507.500		
using products, making dishes according to my customs,	Non-consumer	386.39		0.680	
the cooking of my family is	Consumer	393.10	- 63,781.000		
	Non-consumer	374.89		0.008	
using products of a traditional, lifelong kind is	Consumer	418.18	- 57,661.000		
	Non-consumer	411.76	FO FO O 000	0.000	
spending as little time as possible on food snopping is	Consumer	337.79	- 52,530.000	0.000	
buying foods that are easy to prepare or don't take long	Non-consumer	410.41	50 040 500	0.000	
to cook is	Consumer	340.73	- 53,248.500		
not going to too much inconvenience, eating whatever I	Non-consumer	416.00	E0 272 000	0.000	
can get is	Consumer	328.54	- 50,273.000	0.000	
knowing where the food I eat comes from—country,	Non-consumer	364.92	F2 2(0,000	0.000	
region, PDO—is	Consumer	439.91	- 52,300.000	0.000	
huving quality avon though it costs a hit many i-	Non-consumer	365.58	E2 708 000	0.000	
buying quality, even though it costs a bit more, is	Consumer	438.48	- 52,708.000		
cooling out anoticl offers promotions at it.	Non-consumer	401.34	EQ 070 E00	0.012	
seeking out special oners, promotions, etc. 1s	Consumer	360.50	- 58,072.500	0.012	

 Table 2. Differences in specific food values between organic food consumers and non-consumers.

In the second phase, organic food non-consumers were excluded from the analysis in order to analyse the relationship between the number or variety of foods consumed and the scores for each item by estimating Kendall's Tau-b coefficient. The main result was that only 3 items showed weak significant correlations, indicating a slightly greater concern regarding the diet-health relationship, the impact on rural development and, inversely, the importance of price (Table 3). In short, within the group of organic food consumers, the importance of the values did not appear to have a clear effect on the quantity of foods consumed.

Items For Me (1: Not Important at All–5: Very Important)	Kendall's Tau-b Coefficient			
	All Consumers	Low Consumption Intensity (Once or Twice a Month)	High Consumption Intensity (More Frequently)	
choosing foods based on having a healthy and balanced diet is	0.076	0.064	0.097	
eating particular foods that help to prevent diseases is	0.131 *	0.057	0.244 **	
choosing products/foods based on the possibility of recycling the containers, leftovers, etc. is	0.087	0.131	0.025	
choosing foods that are not produced in a way that harms the environment is	0.056	0.039	0.088	
eating real, natural, non-precooked, unprocessed food is	0.066	-0.005	0.176*	
eating safe food, with guaranteed safety standards is	0.024	-0.052	0.155	
eating exclusive, special, select foods is	0.092	0.029	0.176 *	
buying foods that help control my weight and improve my physical appearance is	0.004	-0.044	0.086	
making special dishes and inviting my friends over for lunch or dinner is	-0.052	-0.048	-0.061	
buying products based on their contribution to rural development, through increasing income for farmers, creating more jobs, etc., is	0.102 *	0.073	0.145	
buying products of a higher quality (taste, smell, aspect, texture) despite them being more expensive is	0.040	0.001	0.105	
choosing products with the lowest possible amount of additives (preservatives, colouring and other additives) is	0.035	-0.041	0.171 *	
using products, making dishes according to my customs, the cooking of my family is	-0.072	-0.117	0.006	
using products of a traditional, lifelong kind is	-0.069	-0.098	-0.018	
spending as little time as possible on food shopping is	-0.046	-0.038	-0.042	
buying foods that are easy to prepare or don't take long to cook is	-0.093	-0.128	-0.034	
not going to too much inconvenience, eating whatever I can get is	-0.103	-0.052	-0.189 *	
knowing where the food I eat comes from—country, region, PDO—is	0.032	0.013	0.066	
buying quality, even though it costs a bit more, is	0.057	0.024	0.119	
seeking out special offers, promotions, etc. is	-0.112 *	-0.133 *	-0.080	

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lable 3. Relationshi	p between numb	er of organic	tooas consumed	i and specific	z value scores.

* correlation is significant at the 0.05 level (2-tailed); ** correlation is significant at the 0.01 level (2-tailed).

Lastly, the analysis was repeated separating the consumers into two groups: those with a low consumption intensity or frequency (who consume the product once or twice a month) and a high one (who consume it more frequently). The underlying hypothesis of this analysis is that consumption frequency may be a clear indicator of different behaviours. Thus, strong, deep-seated values should lead to systematic, frequent behaviour consistent with these values, whereas intermittent use, in which organic foods are alternated with conventional ones, simply indicates a certain awareness of the subject. The results shown in the last two columns of Table 3 indicate that in the low consumption intensity profile there is no clear relationship between the quantity of foods consumed and specific values. In other words, more or fewer foods are consumed independently of the item scores. The weak association found in the case of price may be evidence of a more opportunistic type of consumption: more organic foods are consumed if they are on special offer. In the case of consumers with a higher consumption intensity, there is a clearer relationship between their values and the quantity or variety of foods consumed. In this regard, preventing diseases, natural/unprocessed foods, fewest possible

additives and exclusive/special/select foods are values that are directly related to the quantity of organic foods consumed. The relationship with inconvenience is inverse in this case, meaning that consumers do not mind taking on greater costs of this kind.

By way of summary, in this last group, there are two results worth noting. Firstly, the quantity of organic foods consumed is more related to the consumers' involvement with food in general or the role it plays in their lives. Secondly, environmental awareness is not particularly important, given that it is not related to the quantity of foods consumed in this group. Results are consistent with previous studies [17,35,100].

Thus, in general terms, the relationship between specific values and the number of organic foods consumed appears to indicate that the effect of values on consumption is staggered rather than linear or continuous. At base level, it appears that taking the step to consuming organic foods entails a level of involvement with food in general that is clearly higher than that of conventional food consumers, given that this is manifested in practically all the items. Once that borderline or minimum level is surpassed, there is a jump to the consumption of organic foods (whether one product or several).

These results are in keeping with part of the previous literature, which demonstrates that the term "organic" is a heuristic cue to multidimensional superiority, and that organic consumption is explained by consumers attributing greater worth to a diverse set of values related to health, quality, authenticity, environment, etc. and seeing the product as a bearer of these attributes [16,17]. From this perspective, the main difference between organic food consumers and non-consumers lies in them looking for and valuing different aspects. They represent two clearly distinct ways of understanding the role of a food product, from a basic necessity peppered with hedonistic nuances, to a way or a means by which to channel and project their lifestyles and a solution to some of their most significant concerns.

Within the group of organic consumers, however, the relationship between the number of foods consumed and the specific values is not as clear. The results only really show slightly different relationships according to whether organic foods are consumed occasionally or frequently, in keeping with the results of Barrena and Sánchez [101] or Pino et al. [51]. While in the first case there is no association, and thus the quantity of organic foods consumed will more likely be explained by other factors such as market availability or special offers, in the second case the greater variety of foods consumed is related to a slightly higher level of involvement with food in general (although not to the extent of the clear differences seen between consumers and non-consumers). In general terms, these results are consistent with the supposition that organic food consumption is a multi-stage process in which the first link is coherence with values [34].

Lastly, the results obtained, apart from expanding the general knowledge about a consumer segment with significant worldwide growth potential and a field of study that has recently sparked considerable interest among researchers, also provide answers to some key questions that had not previously been addressed in the literature, such as whether or not consumers who buy organic foods are different from those that do not, or whether those that buy only one organic food are different from those that buy several different organic foods. Furthermore, they highlight the role that values play as a central element in consumer behaviour, thus supporting the previous literature in this field of research.

3.1. Implications for the Promotion of Sustainability (A Suggestion)

Given the need to encourage sustainable behaviour, the crucial question is to what degree the results obtained can be used to this end. In this regard, two points should be taken into consideration. Firstly, environmental values are not among the most important specific values of the consumers surveyed [17,35,102], and, moreover, they are not related to greater consumption or the variety of organic foods consumed. Secondly, it is important to bear in mind that organic foods contribute to sustainability and that their main differentiating feature is that they protect and respect the environment [98,103,104]. Given this situation, the question is: how do we increase consumption? More specifically, how can we increase the consumption of organic foods if their principal real or objective characteristic is not the most important specific value for consumers?

The problem with values as central elements in consumer behaviour is that they are relatively stable and difficult to change. However, the literature shows that it is easier to instil new values than to change existing ones [43,44,105–108], especially in the case of specific values that can be expressed in simple phrases that are easy to get across in communication campaigns. Moreover, considering the crucial importance of selfish values in organic food consumption [17,35,37,97,98], particularly those related to health, perhaps the best way to instil or encourage the behaviour of consuming organic foods is to associate or link the term "health" with "life". In this regard, news items about plastics in the ocean, the Greta Thunberg effect or the ever-increasing number of reports on the link between diet and diabetes, cardiovascular disease and certain types of cancer, etc. can act as catalysts that serve to forge the link between organic food consumption and keeping people and the planet healthy. In essence, the idea is to establish a connection between selfish and altruistic values. It all boils down to trying to repeat and promote a single concept: a healthy life on a healthy planet. There is no health if the planet we live on is sick. In short, instil and promote a specific value, life, which is related to the health of people and their environment.

3.2. Study Limitations and Future Lines of Research

This study is not without its limitations. The first point that should be made in this regard is that the field work is focused on Spain, a country with its own cultural identity, which is likely to influence the general and specific values of consumers. Another point is that although the Spanish organic food market is growing and shows strong potential, it is still relatively underdeveloped. This may affect the quantity or variety and frequency of organic food consumption, as access to organic products, prices, knowledge about them, etc. are not the same as in other more mature markets.

It is precisely these limitations that can inspire future lines of research. It would be interesting to replicate the research in other countries and analyse the effect of different cultures on consumers' specific values related to food in general and organic foods in particular, and, as a result, on their behaviour in relation to these. This would involve conducting a cross-cultural analysis, given that the generality of the results may depend on the specificities of the Spanish market. Lastly, with regard to the most appropriate strategies to raise awareness, it would be of interest to conduct an experimental study on the effectiveness of the suggestion, outlined above, of focusing on the binomial health-life, in order to determine whether it really does have differential effects on attitudes and behaviour compared with other options.

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