

# SELF-DETERMINATION, CLEAN CONSCIENCE, OR SOCIAL PRESSURE? UNDERLYING MOTIVATIONS FOR ORGANIC FOOD CONSUMPTION AMONG YOUNG MILLENNIALS

Journal:	Journal of Consumer Behaviour
Manuscript ID	JCB-20-085.R2
Wiley - Manuscript type:	Special Issue
Keywords:	organic food consumption, young millennials, attitude-behaviour gap, self-determination theory, cluster analysis

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# Short title: UNDERLYING MOTIVATIONS FOR ORGANIC CONSUMPTION AMONG YOUNG MILLENNIALS

#### **Abstract**

The present world has led in individuals to become ever more interested in the consumption of organic food. Accordingly, companies are incorporating these worries in their managerial decisions by paying special attention to market segmentation. In this context, a relevant target audience is that conformed by young Millennials, a group defined by its growing purchase power, its intense influence on societies, but also by its inconsistency in terms of pro-environmental behaviors. In order to understand the mechanisms that rule the human behavior, motivations emerge as fair predictors of sustainable products consumption. Therefore, the present study aims at analysing the motivations that stimulate young Millennials to purchase organic food. Hence, it was conducted a survey study with a total sample of 378 college students. Afterwards, once executed a cluster analysis, four differentiated groups were highlighted: amotivated (23.02%), who have no intention to perform any sort of organic purchase; sociallyinfluenced (24.34%), motivated to purchase organic due to social acceptance; selfdetermined (25.92%), mainly autonomous in their organic food consumption; and conscience-affected (26.72%), who behave organic for self-esteem. Although data reveal the existence of an overall organic concern among the sample, only selfdetermined individuals may be prone to maintain their behaviours among time since the intrinsic motivation they show is higher than that of the other groups. These findings are of undeniable interest. The study of the motivational system of young Millennials will allow companies in the organic food sector to adjust their offer to the relevant target and achieve an enduring organic consumption.

## Keywords

Organic food consumption, young millennials, attitude-behaviour gap, self-determination theory, cluster analysis

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#### 1. INTRODUCTION

Without any kind of doubt, nowadays consumers, increasingly concerned about the environment, assume ever more that there is an overriding need for evolution in our methods of production and styles of consumption if we intend to continue living within the ecological limits of our planet (Barth et al., 2012; Lai and Cheng, 2016; Rana and Paul, 2017). Such concerns have begun to be displayed in their attitudes and, at times, in their behaviours (Akenji, 2014), with individuals particularly interested in the consumption of the so-called 'sustainable products'.

Within this broader category of sustainable consumption, the organic food market has developed significantly in recent years, amounting to almost 97 billion euros in 2018 (FiBL and IFOAM, 2020). By region, North America market has the greatest figures (43.7 billion euros), followed by the European market (40.7 billion euros), and the Asian market (10.1 billion euros). In the same line, worldwide markets point currently positive growth rates in all cases, which are in double digits sometimes.

In this sense, most of the companies in the sector, seeking to remain competitive in the market and to achieve the fulfilment of consumer needs just as much utilitarian as self-expressive (Du et al., 2017; Sharma and Joshi, 2019), have begun to incorporate systematically these emerging worries in their management and marketing decisions by paying special attention to market segmentation and market orientation (Dolnicar et al., 2018; do Paço et al., 2008; González et al., 2015; Lu et al., 2013). To this effect, organic food companies gradually require specific research in order to implement effective marketing communication strategies at the time of focusing on different consumer groups.

In this context, a relevant target audience is that conformed by young adults. Commonly referred as Millennials, youths who reached adulthood in the early twenty-first century represent a group of interest for both business and academic publics due to their growing purchase power and their eventual influence on the upcoming societies and the environment (Heo and Muralidharan, 2017; Kotler et al., 2017). Regarding the central topic of this research, related studies have revealed so far ambiguous findings of Millennials' perceptions of the environment and their tendencies to behave (Coskun and Özbük, 2019). Whereas some authors have found Millennials to be sensitive to environmental problems (Allen and Spialek, 2018; Muralidharan et al., 2016), others have shown that most of these young consumers are not consistent translating these attitudes into actual behaviour (Debevec et al., 2013; Naderi and Van Steenburg, 2018).

In an attempt to comprehend those underlying mechanisms that pace sustainable products consumption, authors note that the psychographic traits of individuals might fairly forecast environmental buying behavior (Jang et al., 2011 Kanchanapibul et al., 2014; Muralidharan and Xue, 2016). Following this same line, motivations are also emphasized as significant predictors of ecological behavior (Bechtel et al., 2006; Grønhøj and Thøgersen, 2017; Moisander, 2007). Concretely, the study of motivational structures contributes to better understand why consumers do not express a high stability in their daily actions and thus why accurate estimations of next purchases are complex (Thogersen, 2004).

Therefore, the present study is aimed at sorting and profiling a group of young Millennials according to the underlying motivations that may drive them to acquire organic food products. This will contribute to shed light on the attitude-behavior discrepancy mentioned lines above.

In this line, the remainder of this paper is structured as follows. Along the following two sections, the essential literature pertaining to factors influencing organic food consumption is reviewed and objectives are developed. After this contextualization, the methodological aspects related to the investigation are presented in the fourth section. Next section is the results of the study. Finally, the last section gathers main conclusions.

#### 2. LITERATURE REVIEW

# 2.1 Organic food consumption and the 'attitude-behaviour gap'

Generally speaking, organic food refers to natural food items free from genetically modified organisms which have been grown without the use of artificially developed chemicals, including herbicides, pesticides, fertilizers, antibiotics, or hormones (Honkanen et al., 2006).

Even though the practice of organic agriculture and organic food represents an activity of great interest which reflects high growth rates in current days (FiBL and IFOAM, 2020), when debating on organic food consumption, it is worth of mention that it was in the 1990s when this market experienced a huge progression mainly due to the rising consumer's concern about the ecological impact of their purchases (Rana and Paul, 2017) and the introduction of the first regulation on organic production within the context of the EU (EUR-Lex, 1991). With Germany and the United Kingdom leading the way initially (Willer et al., 2014), this movement has extended gradually among all developed countries (Willer and Lernoud, 2016) and also become of major relevance in many emerging economies (Ahmad and Juhdi, 2010; González et al., 2015; Hasimu et al., 2016; Kautish and Sharma, 2019; Saleem et al., 2018; Sobhanifard, 2018; Taufique and Vaithianathan, 2018).

Nevertheless, although marketers can assure that needs of environmentally conscious consumers are better addressed if organic products are introduced into the market (Lu et al., 2013), the fact is that organic features are effectively taken into account by only a part of consumers (Janssen, 2018; Vermeir and Verbeke, 2006) and that the organic food market share and consumer expenditure share of organic food and beverages are relatively low when compared to non-organic expenditures (FiBL and IFOAM, 2019).

In the context of this dialectic, aimed at profiling consumers, academics have further tried to explore and understand prospective personal drivers that may lead individuals towards the acquisition and consumption of organic food (Naderi and Van Steenburg, 2018), but despite the substantial evidence gained, the core explanatory factors underlying the purchases of organic items are still ambiguous (Testa et al., 2019).

At this point, the postulation of the 'attitude-behaviour gap' (Carrington et al., 2010, 2014; Chatzidakis et al., 2006; Chekima et al., 2017; Wiederhold and Martinez, 2018) has proved to be certainly valuable and clarifying. In accordance with it, behavioral patterns of consumers are not univocally consistent with attitudes, that is, there is inconsistency between what people claim via their attitudes and the way in which they actually behave (Fuller et al., 2016). Therefore, concerning organic food purchases, evidence has shown that consumers' may declare positive attitudes towards organic

food (Du et al., 2017; Kautish and Sharma, 2019; Naderi and Van Steenburg, 2018), but these are not necessarily translated into actual purchases (Debevec et al., 2013; Haws et al., 2013; Testa et al., 2019). For such an eventuality, two main interpretations emerge: first, consumers will not purchase a product only for its organic attributes sacrificing other products' characteristics (Dzene and Yorulmaz, 2011; Ginsberg and Bloom, 2004; Grunert, 2011; Vermillion and Peart, 2010), and second, consumers face barriers at the time of purchasing organic food itself, for instance, inconvenience, lower performance, lack of awareness, higher prices, skepticism about organic certification, or non-availability of products, amongst others (Haws et al., 2013; Kumar et al., 2019; Naderi and Van Steenburg, 2018; Nguyen et al., 2019; Thøgersen, 2010).

Confronting this matter, academics demand additional studies about the determinants of organic food consumption based on actual purchasing data (Dowd and Burke, 2013; Vassallo et al., 2016; Yadav and Pathak, 2016; Yazdanpanah and Forouzani, 2015) or more profound personal drivers such us values, subjective norms, lifestyles or motivations (Adnan et al., 2017; Grønhøj and Thøgersen, 2017; Jang et al., 2011; Moisander, 2007; Naderi and Van Steenburg, 2018; Peattie, 2010) rather than exploring self-reported behavioral intention data that consumers tend to undermine (Testa et al., 2019).

In this tone, the intention of this study is to analyze the motivational system of young individuals in respect of its capability to adequately predict or determine future organic food consumption.

## 2.2 The Self-Determination Theory and young Millennials

The analysis of motivation as a suitable predictor of the intentions to engage in diverse routines of human behavior is common among the literature (Ryan and Deci, 2017). In this same line, within the theory of motivation, the Self-Determination Theory –SDT-(Deci and Ryan, 2000, 2012; Ryan and Deci, 2017) is well-documented. Authors define six motivational types that differ according to the extent to which they are autonomously supported by an individual: autonomous motivation, integrated motivation, identified motivation, introjected motivation, external motivation, and amotivation. Excluding from the list amotivation, which denotes the no intention to act, the remaining five states could be categorized as intrinsic motivations and extrinsic motivations.

The SDT has also been vastly utilized in studies that address motivations as drivers of pro-environmental behaviors (Baxter and Pelletier, 2020; de Groot and Steg, 2010; Osbaldiston and Sheldon, 2003; Tagkaloglou and Kasser, 2018; Thøgersen, 2006). According to SDT, individuals seem to be more prone to engage in pro-environmental behaviors in a steady manner when they are said to be intrinsically motivated, that is, self-determined, and thus act autonomously or see themselves as initiators of their own behavior aimed at attaining objectively valid patterns. By contrast, people extrinsically motivated may also engage in the same behavior, but feel controlled, lacking in choice, or just behave green because of a sense of obligation related to approval from oneself (to fulfil pre-existing personal attitudes or beliefs) or from others (to satisfy current social schemes).

In support of this, investigations framed under this theoretical framework have showed that the frequency of engaging in a range of pro-environmental behaviors, such as recycling, energy-saving, conserving resources, purchasing environmentally-friendly products, employee green behaviors, or green information technology behaviors

increases when grounded by intrinsic motivations (Graves et al., 2013; Joachain and Klopfert, 2014; Koestner et al., 2001; Koo and Chung, 2014; Pelletier et al., 1998; Seguin et al., 1998; Villacorta et al., 2003; Webb et al., 2013). Also, it has been found that people with stronger self-determined motivational types were more likely to perform pro-environmental behaviors that were perceived to be difficult whereas more extrinsically motivated individuals carried out easier pro-environmental behaviors in terms of time, energy and personal resources involved (Green-Demers et al., 1997; Pelletier et al., 2011; Sheldon et al., 2016; Van der Werff et al., 2013; Venhoeven et al., 2013). Thereupon, it can be assumed thus that intrinsic motivations will provide a more stable behavioral basis for organic food consumption than extrinsic motivations (de Groot and Steg, 2010; Grønhøj and Thøgersen, 2017).

Apart from why people buy organic products, it is also considered remarkable to know who buys such products. By sorting bulk consumers, companies will better target the specific needs of the segmented groups with the properly devised marketing strategy while also meeting at once the company's objectives (Dahlstrom and Crosno, 2018).

Among the entire market, particular emphasis should be given to Millennials. This generation refers to the population born between the mid-1980s and the late 1990s that will soon become the largest living generation surpassing the Baby Boom generation (Statista, 2019). Within it, two main cohorts are distinguished (Fry, 2015): older Millennials (25–33 years), who are beginning their careers in the labor market already, and younger Millennials (18–24 years), still at university, but representing a larger group than the former. Young Millennials, although economically dependent now, are expected to have more disposable income than that of any previous generation (Frank and Chong, 2002; Heo and Muralidharan, 2017; Kanchanapibul et al., 2014; Muralidharan and Xue, 2016) and be a crucial segment in the growth of green consumption practices which will significantly impact on the environment of future society (Fischer et al., 2017; Hume, 2010; Wray-Lake et al., 2010).

For all of these reasons, this very group of young Millennials conforms a high priority segment for marketers (Kotler et al., 2017). However, targeting them in reference to their pro-environmental characteristics can be tremendously challenging since they seem not to be willing enough to adopt green behaviors (Debevec et al., 2013; Naderi and Van Steenburg, 2018) even if their attitudes are so (Allen and Spialek, 2018; Muralidharan et al., 2016). The persistence of the mentioned attitude-behaviour gap reveals the discrepancy between young Millennials' pro-environmental opinions and actions (Coskun and Özbük, 2019; Grønhøj and Thøgersen, 2009; Heo and Muralidharan, 2017), and leads to considerate other psychographic factors as predictors of pro-environmental behaviors such as motivations.

Up to now, little is known about the underlying motivations that drive young Millennials to purchase organic food. In an attempt to connect to the SDT, it should be noted that, even though Renaud-Dubé et al. (2010) found that intrinsically motivated young consumers also tend to perform pro-environmental behaviors more frequently than others, the environmental concern and the commitment to engage in pro-environmental activities is anyway lower and less intrinsically motivated in younger as compared to older generations (Renaud-Dubé et al., 2010; Wray-Lake et al., 2010).

In addition, some authors (Grønhøj and Thøgersen, 2009; Otto and Kaiser, 2014, Watkins et al., 2019) point that learning rather than maturation is responsible for the higher environmental commitment seen in older generations, which means that the more

exposed people are to information that deals with environmental topics, the more pronounced their ecological engagement is, independently from the natural process of change that is common to all individuals because of ageing. All these considerations may suggest that, initially, the reasons why a young Millennial acquires organic food would be often externally regulated or extrinsically motivated but would become internalized, assimilated to the self, or intrinsically motivated in the long term mainly due to the learning process instead of the maturation.

Bearing in mind all previously mentioned, the present study is therefore intended to segment young Millennials on the basis of the diverse underlying motivations that stimulate them to purchase organic food. In this sense, the contribution of the study will be twofold: first, it will enable a better comprehension of the attitude-behavior gap, and more particularly, the motivational system that prompts young Millennials to organic food consumption, issue in which the related literature is scarce, and second, it will provide companies in the organic food sector with valuable information to better adjust their offer to a relevant target as depicted above and achieve an enduring organic consumption.

#### 3. METHODOLOGY

# 3.1. Sampling

In order to address the purpose previously pointed, it was conducted a survey study with a total sample of 378 college students at the Faculty of Business and Economics of the University of Leon (Spain). The sample comprised 204 females (54.0%) and 174 males (46.0%), aged 18 to 28 years old ( $\mu$  = 20.59;  $\sigma$  = 2.38). For more detailed information about methodological aspects, see Table 1.

Table 1. Technical data.

#### 3.2 Measure

All respondents answered voluntarily to a questionnaire composed of two main sections. The first section gathered information about the most basic demographic variables, age and gender. In turn, the second section was integrated by 25 items concerning diverse motivations for organic food consumption. For each item, participants were asked to report their level of agreement on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). Concretely, these 25 items were organized in three scales representing three different concepts of motivations (Table 2):

- a) Self-determination motivations (8 items): Intrinsic motivations based on objective drivers that lead to durable organic consumption. The organic consumption is accomplished under impartial and neutral premises, independently of pre-existing personal attitudes or beliefs, and due to the benefit that entails its fulfilment per se.
- b) Personal image motivations (8 items): Extrinsic motivations based on subjective drivers that lead to non-durable organic consumption. The organic consumption is achieved to satisfy principles and values attached to the personal image, and regarded as act of individual defense and reinforcement.
- c) Social context motivations (9 items): Extrinsic motivations based on established social standards that also lead to non-durable organic consumption. The organic consumption is executed to meet social schemes, to gain society acceptance or just for social pressure/imposition.

#### Table 2. Questionnaire statements.

Scales, originally developed for this research, were evaluated by a group of experts who was selected in order to assess the content validity (Hernández-Sampieri et al., 2010; Muñiz and Fonseca-Pedrero, 2019; Skjong and Wentworth, 2000). The group was compounded by three academics in marketing research and a professional in psychology. They presented suggestions about the potential deletion/modification of existing items, and/or the inclusion of prospective ones. Particularly, the criterion considered to add an item to the final version of the instrument required, the at least agreement of 80% of experts (Hyrkäs et al., 2003).

Once data were collected and processed, Cronbach's alpha ( $\alpha$ ) coefficients for each one of three scales were calculated with the intent to check the reliability levels. After that, it was conducted an Exploratory Factor Analysis in order to assess constructs validity and a k-means Cluster Analysis to segment respondents by using the software SPSS version 24.0.0.1.

In the next section, main results are presented under two sections: first of all, the study of reliability and validity of constructs, and after that, the analysis of the different clusters.

#### 4. RESULTS

# 4.1 Scales reliability and constructs validity

In order to assess the internal consistency of the self-determination, personal image, and social context motivations scales, it was verified the Cronbach's alpha coefficient ( $\alpha$ ), which is considered tolerable when stands above .70 (Nunnally, 1978; Nunnally and Bernstein, 1994). The reliability of the scale is ensured since  $\alpha$  coefficient was higher than .70 in the three cases (Table 3).

Moreover, it was also examined the validity of the three constructs (self-determination, personal image, and social context motivations) by executing an Exploratory Factor Analysis. Construct validity attempts to guarantee the existence of an underlying dimension that supports the scale scores. The analysis reported a Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy certainly satisfactory (0.925) according to Kaiser (1970, 1974) and a Bartlett's Test of Sphericity (Bartlett, 1954) statistically significant at 99% level of confidence (p < 0.01) (Table 3).

Table 3. Scales reliability, KMO measure, and Bartlett's Test.

After the related principal component analysis, three main dimensions emerged explaining 53.32% of the total variance. Furthermore, factorial loadings were of .50 or higher for all items in its corresponding dimension, providing strong evidence of convergent validity to the scales (Barclay et al., 1995), with the exception of items 13, 16, 19, 20, 24, and 25, which were excluded for subsequent analyses (Table 4).

Table 4. Factorial loadings (Varimax rotation).

#### 4.2 Clustering

In second term, a k-means Cluster Analysis was conducted from the three factors retained in the previous analysis in order to segment young Millennials who were surveyed. After several preliminary trials, this statistical procedure distinguished four

groups of individuals which come together through similarities in various aspects associated to the three sorts of motivational dimensions.

Once interpreted and compared characteristics and patterns of each cluster, the different segments were labelled with the names *amotivated*, *socially-influenced*, *self-determined*, and *conscience-affected* (Table 5).

Table 5. Clusters' size.

Table 6. Clusters scoring.

Amotivated, 23.02% of the sample (Table 5), represent the absence of any kind of motivation for organic consumption. Youngsters of this group have no intention to perform any organic purchase at all, at least in the short or medium-term (Table 6). Usually, amotivation is accompanied by feelings of incompetence, lack of control, and no-sense of purpose, reward, or change of course with respect to pro-environmental behaviours.

By contrast, *socially-influenced*, 24.34% of the sample (Table 5), show the strongest motivation for organic consumption of the entire group of participants, although it is true that its nature is extrinsic (Table 6). *Socially-influenced* young adults are motivated to purchase organic due to social acceptance or social imposition, that is, by the need to belong to a group or social background. This group show a timid understanding of what an organic product objectively is, and hence, an unsteady motivation to act autonomously.

Self-determined represent 25.92% of the sample (Table 5) and the most intrinsically motivated group of the young adults interviewed (Table 6). These people know quite accurately the process for organic production, and use this information to fuel their willingness to act pro-environmentally, which is autonomous, resolute and unbiased. Anyhow, this cluster of *self-determined* individuals also show extrinsic motivations in terms of personal image. This indicates that foreign aspects to organic production such as subjective considerations related to the individual's conscience may have a certain effect on their predisposition to perform a sustainable consumption (e.g. the autodefinition an individual has about him/herself). Besides that, the social context does not seem to exert excessive influence over this group.

Conscience-affected, 26.72% of the sample (Table 5), are extrinsically motivated to carry out organic consumption (Table 6). Conscience-affected youngsters behave organic for self-esteem and clean conscience reasons. They are not quite familiar with what organic production refers to (actually, their knowledge on it is poorer than that of amotivated people), and therefore, they are neither autonomous nor self-determined if acting pro-environmentally, but they consider that doing so is a sign of good person.

## 5. DISCUSSION

The present study has enhanced the comprehension of what stimulates young Millennilas to organic food consumption. In this sense, concerning the theoretical contribution of this research, it has been proposed and examined a conceptual approach to understand how self-determined, personal image, and social context motivations can explain factors influencing youths' actual consumption of organic food instead of being limited to intention to purchase (Testa et al., 2019). In this sense, it should not be ignored that there are few studies that empirically test the motivational structure of young Millennials towards this topic.

In the light of the findings, there is a concern that the organic intrinsic motivation of the young generation appears to be erratic. It should be kept in mind that, apart from a group of young individuals without any kind of motivation (amounting to 23%), approximately 50% are extrinsically motivated to act organic, which implies a priori a poor hope of lasting in the long term (de Groot and Steg, 2010; Grønhøj and Thøgersen, 2017).

Moreover, it has been found that the motivational structure is not simple. For instance, *self-determined* youngsters, almost 26% of the sample, appeared to be both intrinsically and extrinsically motivated. In this case, the evolution of organic purchases along time is even more imprecise. And above all, there is a discrepancy between attitudes and behaviour (Chekima et al., 2017; Naderi and Van Steenburg, 2018), whereby behavioural patterns are not univocally consistent with attitudes, which is expected to affect *conscience-affected* and *socially-influenced* Millennials in greater extent than *self-determined* ones.

Also, results largely contribute to inspire practical considerations by revealing valuable information for producers and marketers of organic food who are promoting the consumption of their offer and are seeking to know the underlying behaviour of their young consumers. Accordingly, the study is of importance to the government due to its attempt to promote organic consumption creating confidence among its citizens holistically besides introducing the corresponding organic certificate in regard to the compliance of organic farming in terms of production, preparation, storage, and labelling.

This investigation is aligned with other recent and remarkable studies on proenvironmental behavior and Millennials segmentation such as Coskun and Özbük (2019). In this connection, *amotivated* Millennials could be deemed as equivalent to *non-greens*, *conscience-affected* and *socially-influenced* to *reluctant greens*, and *selfdetermined* to *true greens*. However, this association must be contemplated with extreme care since the mentioned authors do not focus their research on a concrete product category, use an entirely different group of variables to carry out the segmentation, and performed the data gathering in the context of an emerging economy.

Nonetheless, whichever the case, from the marketing practitioners' perspective, this situation confirms the importance of formal organic education by increasing young Millennials' exposure to credible information about the organic food production and consumption through both formal (Internet, television,...) and informal sources including social media and groups of reference.

Furthermore, organic food consumption could be also stimulated by launching differentiation strategies and promoting conventional foods substitution in the shopping basket. Some of them could be including safety certifications, stating clearly environment and farm solidarity motives, or highlighting the good taste and quality of organic food products. Alternatively, a larger number of prospective organic consumers could be attracted by the curiosity carrying out promotional campaigns played on prices, or conducting information and tasting panels.

Even so, attention should be drawn to the fact that these short-term measures will uniquely reduce the group of *amotivated* youths generating a priori extrinsically motivated individuals (*conscience-affected* and/or *socially-influenced*).

If the final goal of companies is to facilitate the internalisation of extrinsic motivations and nurture an enduring organic consumption held in the long-term that results in young consumers' loyalty (*self-determined* consumers), it will be necessary to monitor all these strategies along time. Only the learning process maintained in the long term is cause for intrinsic engagement in organic food consumptions, not so much the process of ageing of individuals (Grønhøj and Thøgersen, 2009; Otto and Kaiser, 2014, Watkins et al., 2019)

Ultimately, as Grønhøj and Thøgersen (2017) suggest, understanding how young Millennials' intrinsic motivation is established and supported is key to fostering a young generation that will engage in pro-environmental behaviours and favour the transition towards a more sustainable society.

Finally, despite the contribution of this study, the scope of the findings is limited by some aspects. First of all, it is necessary to point that the research context is only focused on a single product category (organic food), which restricts the generalizability of the results to other products. In the same line, this study has retrieved information from one particular geographic region (North-west Spain) and one concrete population segment (college economics students). Moreover, another factor that should not be overlooked is that the measuring instrument has not been tested and validated before, even though it has been developed from theoretical foundations and associated reliability and validity analyses have been included. These limitations, however, represent new opportunities for an enhanced future research, since this approach if replicated (e.g. in other sectors of activity) and expanded (e.g. to national/international contexts, to other young adults segments) and its errors if controlled would endow future studies with greater validity, generalizability and comparability of results.

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Table 1. Technical data.

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Population	College students at the Faculty of Business and Economics				
Population size	1695 individuals				
Sample size	378 individuals				
Surveying technique	CAWI (computer aided web				
	interview)				
Sampling method	Convenience sampling				
Sampling error ( <i>e</i> )	±4.53%				
Level of significance ( $\alpha$ )	95.5% (p = q = .50)				
Surveying period	March 2018 to March 2019				

Source: Authors.

Table 2. Questionnaire statements.

#### Self-determination motivations:

- 1. I use to make sure that the products I purchase have been obtained without the use of chemical pesticides
- 2. I avoid purchasing products containing artificial substances (additives, preservatives, etc.)
- 3. I am accustomed to searching for evidences that the products I buy have been grown with farming methods that protect and preserve the environment
- 4. It is of fundamental importance for me that the products I buy are labelled with any official organic certificate
- 5. I need to be assured that the products I purchase have been obtained without the use of chemical fertilizers
- 6. I use to look for indications that the products I purchase have been obtained respecting the natural growth rate of the plants
- 7. I am glad to know that the products I choose have been grown using cultivation methods adapted to local conditions for its optimal use
- 8. I seek to avoid the purchase of products containing genetically modified organisms

## Personal image motivations:

- 9. When I buy products with any sort of organic label, I feel I am contributing to the well-being of society
- 10. Buying products from organic farming is a simple gesture to contribute to the preservation of the environment
- 11. I like to see myself as a consumer concerned about the impact of my purchases on the environment
- 12. When I identify a product salient because of its organic character I feel that buying it is the right thing
- 13. In the extent of possible, I try to contribute to the environment by purchasing organic products
- 14. Buying products from organic farming makes me feel good about myself
- 15. If close at hand, I always try to contribute to environmental causes through the purchase of certain products
- 16. I consider that buying products from organic farming contributes to the development of society

# Social context motivations:

- 17. People close to me place value on the consumption of products from organic farming
- 18. I am used to receiving approval comments when I purchase products from organic farming
- 19. In a family environment it is common to acquire products from organic farming
- 20. Buying products from organic farming is a way of conveying your values for others
- 21. Some of my friends encourage me to buy products from organic farming
- 22. I like being recognized as a consumer of organic products by others
- 23. In my educational environment, the consumption of products from organic farming is warmly encouraged
- 24. People should choose products labelled with organic tags
- 25. I think that media help to raise people awareness about the importance of acquiring products from organic farming

Source: Authors.

Table 3. Scales reliability, KMO measure, and Bartlett's Test.

Tuoto 5: Sources foliability, 111/10 inicusare, and Burtie	
Cronbach's Alpha	
Self-determination motivations	.867
Personal image motivations	.821
Social context motivations	.709
KMO and Bartlett's Test	
Keiser-Meyer-Olkin Measure of Sampling Adequacy	.925
Bartlett's Test of Sphericity	
Approx. Chi-Squared	2775.268
df	171
Sig.	.000

Source: Authors.

Table 4. Factorial loadings (Varimax rotation).

	Item	Self-determination dimension	Personal image dimension	Social context dimension
			unnension	unnension
1		.667		
2		.720		
3		.611		
4		.639		
5		.764		
6		.598		
7		.624		
8		.610		
9			.710	
10			.693	
11			.605	
12			.713	
14			.653	
15			.527	
17				501

18			.635
21			.752
22			.583
23			.687
Eigenvalue	4.240	3.024	2.867
Variance explained (%)	22.313	15.917	15.087

Source: Authors.

Table 5 Clusters' size

Table 3. Clasters size.			
Clusters	Cases	Percentag	
Amotivated	87	23.02%	
Socially-influenced	92	24.34%	
Self-determined	98	25.92%	
Conscience-affected	101	26.72%	
Total sample	378	100.00%	

Source: Authors.

Table 6. Clusters scoring.

Motivational dimensions*	Amotivated	Socially- influenced	Self- determined	Conscience- affected
Self-determination motives	012	.329	.830	-1.095
Personal image motives	-1.243	.126	.576	.396
Social context motives	369	1.239	701	131

<sup>\*</sup> p < .01 (significance level of 99%)

Source: Authors.