

Perception and Motivation to purchase Biological Products

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Abstract:

This paper aims to study factors that influence the consumer behaviour of biological products such as perception, attitude, motivation (health and environmental concern), involvement and purchasing intention. The biological products are healthier and more nutritious than the conventional products, they have the best taste and they are manufactured without chemicals products and they protect the environment.

Key words: Biological products, buying behaviour, perception, attitude.

Introduction:

Agriculture is an important economic sector in the countries in the process of development (Nooripoor et al, 2008). During last decades, the growth of the environmental awareness and concerns health called into question the practices of modern agriculture (Akbari and Asadi, 2008), in particular the health concerns of the biological products. The most common definitions of a biological product focus on the technological or production practices as well as the principles employed or "biological philosophy" (Klosky and Tourte, 1998; Bourn and Prescott, 2002). Some definitions highlight dimensions such as the systems "biological" or "natural production" and "green" or "respectful of the environment» (Klosky and All, 1998). Others highlight the limited use of artificial chemicals products in the biological production. According to Stobbelaar and al, (2006), the biological products are food substances produced without pesticides, artificial chemicals and without genetic modification in their production. The biological products have unobservable characteristics by the consumer but they play an important role at the time of shopping. Thus, if the consumer decides to buy the biological products this depends on several factors including the attitudes towards these unobservable characteristics of biological products such as environmental protection, food safety,...

Some studies in the literature of the consumer behavior have identified the explanatory factors of the behavior of purchase of the biological products (Zakowska-Biemas, 2008; Shaharudi et al, 2010). These factors are related to the attitudes, perceptions and information about the biological product. Based on these findings, we can advance our problem which consists in

studying the Tunisian consumer's behavior towards the biological products by the attitude, perception, motivation, involvement, the purchasing intention and the behavior of purchase by highlighting the relationships between these variables. For that it is essential to define these various variables by specifying their utility in our study.

Consumer perception towards biological products:

The perception of the consumer's towards the biological products is positive because it is affected by the negative impact of conventional production. The long-term impact on health as well as the harmful effects on the environment of the latter has led some consumers to shift from conventional foods in favor of biological food.

Several studies of consumption were undertaken in North America and Europe in order to evaluate perceptions of the consumer perceptions of biological food (Baker and Crosbie, 1993; Groff et al, 1993; Hutchins and Greenlagh, 1995; Thompson and Kidwell, 1998 O'Donovan and McCarthy, 2002; Wolf, 2002). The main results of the studies on attitudes and the consumer's choices for biological foods are summarized in Table 1. Most of these studies allowed to conclude that consumers buy biological products because they consider that they are safer, healthier and more respectful of the environment than the conventional products. Studies have indicated that health and hygiene of the products were the main attribute of quality which the consumers of biological products take into account. Concern for the environment was less important than the hygiene of the products and health related concerns, which gives to understand that these consumers are likely to go private or personal benefits of the organic farming before its benefits for the company.

TABLE 1: Perception towards biological products

Authors	Results of search on consumer preferences for biological products
Misra and al. 1991	61% of respondents perceived biological products as products that are free of chemical residues.
Baker and Grosbie, 1993	Consumer preferences for product safety is determined by the extent of damage caused by these products.
Groff and al. 1993	The analysis of consumer preferences between biological and conventional products has shown that freshness, health, nutritional, certification, safety and brand are the main factors that influence consumer preferences when buying a biological product.
Hutchins and Greenhalgh, 1995	93% of consumers reported that they buy biological products for health reasons and that these products are better for children. But, less than 30% of consumers claim that biological products are not harmful to the environment.
Wolf, 2002	Interviewers collected the biological grape as a product which is characterized by a fresh and sweet appearance, no pesticides, seeds and insects, reasonable prices and better nutritional value.

In the literature, there exist several studies which have been devoted to the study of the will to pay more in order to respect the environment (Corsi and Novelli, 2003; Govindasamy and Italia, 1999) and specifically for the biological products (Krystallis and Chryssohoidis, 2005). Several studies have estimated the predisposition of the consumer to pay more expensive for the biological products (Jolly, 1991; Gil et al, 2001). Overall most consumers are ready to pay a percentage of 10 to 20% more for the biological products (Hutchins and Greenhalgh, 1995).

The value of the bonus would depend on the product itself, of cultivated agricultural and of the warranty against the risk (Gil et al., 2001). The consumer understood that the biological products have values and benefits; this is why it is predisposed to pay more to acquire Shaharudin et al (2010). The buyers of biological products are ready to pay more for the food value attached to the concerns of safety (Henson, 1996).

Several studies have indicated the existing difference between the quality of the conventional products and of the biological products (Finesilver et al., 1989; Woese et al., 1997;

Worthington, 1998; Brunso et al 2002; Midmore et al., 2005). They showed that the quality of the biological products is better than the quality of the conventional products. Quality has an effect on the motivation to pay more than the satisfaction and nutritional value (Krystallis and Chryssohoidis, 2005). Govindasamy and Italia (1999) consider that socio demographic variables namely age, gender, income and education, contribute to the explanation of the behavior of refusal to pay more for the biological products. But for other authors, these results are rather contradictory and do not allow to conclude the correlation between the variables (Davis et al., 1995; Laroche et al., 2001). This could be explained by differences between the samples, the countries and the rates market of the studies undertaken. The main results of the studies chosen on the willingness of the consumers to pay more for biological products are presented in Table 2.

TABLE 2: The willingness to pay expensive for the biological products

Authors	Results
Misra and al 1991	87% of respondents are willing to pay 10% more for fresh produce Gergia.
Govindasamy and Italia 1999	In the USA, 35% of interviewer's willingness to pay at least 10% more for biological fruits and vegetables, for against 46% are willing to pay less than 10% and 19% would not pay an additional premium for these products.
Volosky and al 1999	This study demonstrated that it is a negative relationship between willingness to pay more and the excess premium paid for certified products environmental products.
Wier and calverly 2002	This study focused on the biological market in Europe, it made the request of the consumer depends on the motivation, demographics and willingness to pay more for these products. The percentage of the excess premium varies from one country to another. It showed that the excess premium paid for these products may be a barrier to purchase if it is high.
Krystallis and Chryssohoidis, 2005	Greek consumers are willing to pay more for biological products. This will is influenced by factors which differ according to the biological product category. These factors are quality, food safety, brand and trust in certification.

Attitude towards the biological products:

Gestures which the consumers arise in respect of biological food are guided by their attitudes, which in their turn are related to a complex set of ideas, motivations and experiences. Several studies have examined consumer attitudes toward the biological products, in a broader direction, to food security (food warranty) and quality of biological products (Stolz et al 2010, 2011; Chen, 2009; Tarkiainen and Sundqvist, 2005). Thompson (1998) provides a detailed research on consumer request for the biological products in Italy.

Midmore et al. (2005) did the same research in the European context. Stolz and al. (2011) developed a detailed research on consumer attitudes toward the conventional products versus biological and distinguished that the concept of the attitude is divided into five dimensions namely the concerns of the ingredients of foods, the will to pay an expensive price for the quality of products, health concern for the biological food products, the quality of participation and the nutrition of the substances and the preferences for food. Stolz and al (2011) treated consumer attitude towards conventional products more than towards a product having a biological attribute (no artificial additives and no use of genetically modified organisms) concluding that the differences of the attitudes between the two buyer's products were generally larger than those between buyers of the conventional products more. Attitudes towards the safety of the biological product are those that explain the biological preferences. Chen (2009) studied the attitude towards the biological products and examined the moderating role of the health lifestyle on the relationship between the latent variables. Its results showed that health and environmental concerns are the main antecedents of attitude. Tarkiainen and Sundqvist (2005) examined the subjective norms as a history of the attitude of Finns towards the biological products and showed that they indirectly influence the purchasing intention of the biological products through attitude. Tsakiridou et al. (2008) noted the effect of certain variables on attitudes, namely: the health and environmental concerns, the level of consciousness, the price, the availability, the quality and design of the biological products. They are added the contribution of the socio demographic variables in the explaining of the attitudes of the consumer toward the biological products but in a limited way. Padel and Foster (2005) explored the gap between attitudes and the behavior of purchase of the biological products through a quantitative study. The results have revealed the correlation between the two constructs. Magistris and Gracia (2008) focused on the decision making process of biological products in the south Italy, they concluded that attitudes towards health and the environment are the main factors of the process of purchase decision. Several

studies showed that a majority of consumers prefer the biological products and are interested in them (Wandel and Bugge, 1997; Brunso et al, 2002). The consumers have a positive image of the biological products because of their perceived value of health and the nutritional security (Beharrell and Macfie, 1991; Tregear et al 1994; Thompson and Kidwell, 1998; Gil et al, 2001). Moreover, Magnusson (2004) concluded that the beliefs related to the biological products are "more valuable" and "stronger".

Motivation towards the biological products:

The question underlying the purchase of biological products is that the motivations which push the consumers to be directed towards such a product rather than another (Baker et al, 2004; Padel and Foster 2005; Hamzaoui and Zahaf, 2009). The literature review shows that consumers buy the biological products for the following reasons: the biological products are healthier and more nutritious than the conventional products, they have the best taste and they are manufactured without chemicals products and they protect the environment (Fotopoulos and Kryskallis, 2002; Wier and Calverley, 2002). According to Davies et al, (1995), the consumers buy the biological products because they perceive them as healthy products. Health concerns are important motivations for the purchase and the consumption of biological products (Tregear et al., 1994; Wandel and Bugge, 1997; Magnusson et al., 2004; Foster and Padel., 2005 and Grankvist Biel, (2001). Besides, the health concerns are important to predict the attitudes and the biological purchasing intention of product (Magnusson et al, 2001; Magnusson et al, 2003; Fotopoulus and Krystallis, 2002). From where the health concerns are key factors influencing the choice of consumption. Compared to the concerns environmental (Tregear et al., 1994; Schifferstein and Oude, 1998; Alvensleben, 1998), the health concern is the most important motivation for buying of the biological products (Tregear, et al, 1994; Schifferstein and Oude Ophuis, 1998). Table 3 presents the list of authors who argue that health concern is the most important reason to buy the biological products.

TABLE 3: Reasons for organic products

Authors	Principal conclusions
Tregear and al. (1994)	This study showed that the health concern, of which the percentage is about 45%, dominates the environmental concern at the rate of about 9%.
Alvensleben Reimer, (1998)	The health concern is the dominant motivation with 59%, followed by environmental concerns with 15% for the purchase of biological products.
Shifferstein and oude ophins, (1998)	41% of consumers are concerned about the environment and 70% are concerned about health when buying biological products. Hence, the health concern is the most important motivation in the decision making in the process of buying biological products.
Mugnusson and al, (2001)	The health concern is the most important reason to buy biological products. Hence the health concern plays a key role in predicting consumer attitudes toward the following biological products: milk, bread, meat and potatoes.
Fotouplos and Krystallis, (2002)	The health concern is the most important motivation that influences the demand for biological products. In other words, this concern affects purchase intention. Consumer choice and is influenced by this concern.
Sandalidou and al, (2002)	Consumer satisfaction with regard to biological olive oil is determined by the motivation is the most important: health concern.
Mugnusson and al, (2003)	In Sweden, the health concern is the most important predictor compared to the environmental concern in the study of the attitude, intention and purchase frequency.
Zakowska-Biemans, (2008)	This study showed that 59% of Poles are concerned about health; however, 28% are concerned about the environment.

The intention to buy biological products:

Azjen and Fishbein (1980) in their theory of reasoned action and Azjen (1991), in the theory of planned behavior, have stated that the behavior of a person (buy, vote,...) is determined by its intention to conduct this behavior. For these authors, the intention is the best predictor for

behavior. In general, more the attitude and the subjective norm are favorable, more perceived control, the higher the person's intention performs the behavior. Shaharudin and al. (2010) identified the factors of the perceived value and their effects on purchase intention of consumers. They concluded that of the four factors (perceived value, awareness of health, religious factors and food security concern), only the perceived value and awareness of health affect the intention of consumer purchase. Food safety concerns and religious factors have less impact on consumer purchase intentions. Pernin, (2011) identified the main variables predictor of the purchasing intention of biological products of the consumers. These beliefs concerning the support of the local producers, the beliefs in terms of environmental benefits and regional identity. Other variables take only a small part in the model (injunctive and descriptive norms, beliefs about the health benefits of the regional products) and the perceived of control over the behavior is not significant.

Ahmat and Juhdi (2010) studied the explanatory factors of the purchasing intention of the consumers of these products, by showing the strong influence of perception and beliefs relating to the food safety of the bought biological product. Kim and Chung (2011) examined the effect of consumer values (consciousness of health and the environment), previous experiments on purchase intent of the biological products and the moderating effect of behavioral control perceived on the relation between the attitude and purchasing intention.

Their result shows that the conscience of the environment positively affects the attitude towards the biological products. The past experiences are also predictors of the purchasing intention; perceived behavioral control moderates the relation between the attitude and the intention to purchase. These findings reported improvement on the theory of the planned behavior. Byrne (1991) established a conceptual framework where the green behavior is determined by exogenous variables such as socio-demographic and lifestyle and endogenous variables such as the level of knowledge and the environmental attitudes. The relationship between exogenous variables and endogenous variables formed a new variable called "ecological implication," that induces finally the biological behavior buying. Najjar and Zaiem (2010) studied the effects of the durable implication on the intention and the ecological behavior of purchase. We examined the influence of the implication as an antecedent of the biological purchasing intention in our research. In conclusion, the buying behavior of the biological product depends on the purchasing intention that is a precursor of the final level of buying biological products, which depends on the attitude and the implication.

Hypothesis development:

Perception / attitude:

Magnusson and al, (2001); Magnusson, (2004); Bonti-Ankomah and Yeredon, (2006); Pernin, (2011); have shown that the perception helps to explain consumer attitudes. The higher perception is, the more attitude of consumers of biological products is important. Therefore, a positive relationship between these two constructs.

H 1: The perception has a positive impact on consumer attitudes toward biological products.

Attitude / buying intention:

Some research has confirmed that the intention to purchase biological products is influenced by the attitude of consumers (Tarkianien and Sandqvist, 2005, Cracia Magidtris, 2007; Ahmad and Nurita; 2010; Pernin, 2011). They showed that the attitude is a determining factor of the buying intention. The higher the attitude is, the more the buying intention of the consumers of biological products is important. Consequently, there exists a positive relation between these two built.

H 2: The attitude has a positive impact on buying intention.

Attitudes / buying behavior:

The work of Magnusson and al, (2001) and Cracia and Magidtris (2007) showed that the attitude helps to explain the behavior of biological purchase and this by regarding the attitude as being an explanatory factor in buying behavior.

H 3: The attitude has a positive impact on the buying behavior.

Involvement / buying intention:

Leg and al, (2006), demonstrated that the involvement in the shopping channel has a very strong influence on buying behavior. Kim and al, (2007), concluded that there is a positive relationship between involvement in online shopping experience and the intention of the customer to a retail sale website. Najar and Zaiem (2010) found that the durable involvement influences the purchasing intention of the ecological products positively. Thus, our study leads to empirically test the impact of involvement on the buying intention.

H4: The involvement has a positive impact on the buying intention.

Intention / buying behavior:

The purpose of the study of Tarkirinanen and Sundqvist, (2005), is to test the extension of the theory of the behavior planned within the framework of purchasing of biological products. This study showed the existence of a positive relation between intention and buying behavior of biological products. Gracia Magistris (2007) showed that purchase intention influences the behavior of purchase positively. Some research has confirmed the link between intention and behavior of purchase in green marketing. Najjar and Zaiem (2010) revealed that purchase intention influences positively the ecological behavior of purchases. Hence the hypothesis five stipulating the influence of the intention on the biological behavior.

H5: The buying intention has a positive impact on the buying behavior.

Involvement / buying behavior:

The study of Shukla's (2004) confirms the importance of involvement in the behavior of the switching brands of several product categories. Drichoutus and al, (2007), studied the variables that influence the involvement of consumers in food products. Najjar and Zaiem (2010) noted the importance of sustainable involvement in the ecological behavior of purchases. Therefore, our research focuses on the impact of the involvement on the behavior of purchase of a biological product, from where the following hypothesis.

H6: The involvement has a positive impact on the buying behavior.

Motivation / attitude:

Some researches in the literature have highlighted the contribution of motivation in explaining the attitude of the organic consumer (Chen, 2009). More motivation is, more the attitude of consumers of organic products is important. Among the reasons, there are health and environmental concerns (Magnusson et al, 2003; Magnusson et al, 2001). They have argued that health concerns have a significant positive impact on the attitude, and considering that these concerns are explanatory factors of attitude. More concerns is, the higher the attitude of consumers of organic products is considerable. Regarding environmental concerns, previous research has indicated that environmental concerns have a significant positive impact on the attitude (Schifferstein and Oude-Ophuis, 1998; Von Alvensleben, 1998). The higher concerns are, the more the attitude of consumers of biological products is important. On the basis of the fact that the motivation influences the attitude, two hypotheses can be formulated:

H7: Environmental concern has a positive impact on consumer attitudes toward biological products.

H8: Health concern has a positive impact on consumer attitudes toward biological products.

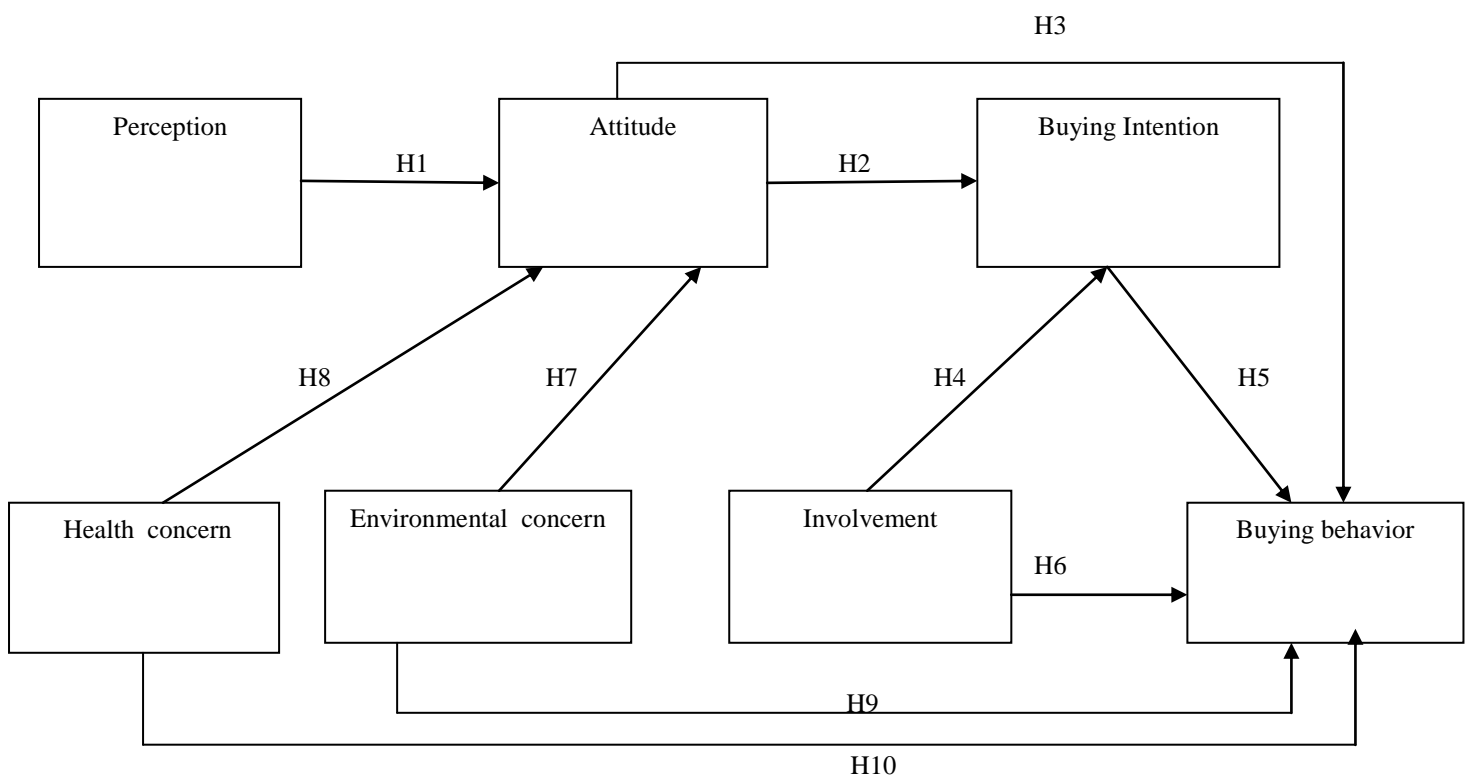
Motivation / buying behavior:

Previous work has demonstrated the significant and positive relation between motivation and buying behavior of biological products (Millock and al., 2004; Durham and Andrade, 2005; Padel and Foster, 2005). The higher motivation is, the more behavior of consumers of organic products is important. Consequently, the motivation contributes in the explaining behavior. Motivation is composed of two factors, in fact: the health and environmental concerns. Millock and al (2004); Durham and Andrade, (2005); Foster and Padel (2005) have affirmed, through their studies, the positive and significant impact of the health and environmental concerns on behavior.

H9: Environmental concern has a positive impact on the biological buying behavior.

H10: Health concern has a positive impact on the biological buying behavior.

Figure 1: The conceptual model



Method:**Measures:**

All the measurement scales were adopted from the literature and adjusted to the research setting of Corporate Social Responsibility. 15 items were developed by Said (2010) to measure the perception. The attitude was measured of a scale (20 items) proposed by Tsakiridou (2008). Health concern (10 Items) and environmental concern (8 Items) were measured respectively by Cheung (2005) and Shepherd (2005).

Involvement was measured using a scale with 6 items developed by Strazzieri (1994). To measure buying intention and buying behavior, we used two scales proposed respectively by Ahmad and Nurita (2010) composed of 8 items and Chan and Lau (2000) composed of 2 items. All the items were measured on a seven-point Likert scale.

Sample and data collection:

The empirical study was carried out in the corporate social responsibility, in particular the motivation to purchase biological products in Tunisia.

The target population for the study was customers who have experience of buying biological products. Sample selection was as a result of the convenience method. A questionnaire was elaborated and pre-tested near 25 customers (10% of the sample) in order to ensure the good comprehension of the questions by the interviewed. The final questionnaire was done by face to face and was sent to the likers of some biological products by Facebook. In total 297 questionnaires were distributed, 250 usable responses were obtained after excluding incomplete questionnaires, indicating 84% response rate from those who agree to participate.

Analysis method:

Exploratory factor analyses were used to assess the properties of the measurement model using SPSS 18.

In order to measure the construct reliability scales, Cronbach alpha scores were used to purify the measurements. This indicator confirms the internal coherence items for any scale. Also, using the Principal Component Analyses (PCA) allows the researcher to examine the properties of the seven measuring instruments, and to reduce the number of items.

Results:

Respondent Demographic Characteristics:

Approximately 47% of respondents were male (118), and 53% were female (132). The majority of respondents were of the age above 44 years old (54, 5%), 27, 1% were between 25–44 years old and 18, 4% were under 25 years. The majority of respondents were executives (78, 4%), 18% were student and 3, 6% were employee.

Reliability tests:

The dimensionality of the seven variables was examined using exploratory factor analysis via SPSS 18. Most reliability of scales were ranged from 0,816 to 0,951, which we can accept these values. All variables are unidimensional and explain more than 50% of variance extracted. In this analysis, items were removed whose communality were insufficient (<0.5). The Cronbachs' alpha of each variable was greater than 0, 8. All these measures are summarized in Table 4.

TABLE 4: Structure and reliability of the scales of measurement

Scales of measurements	Factorial structure	Explained variance	Reliability	KMO Test
Perception	Unidimensional	91,102	0,889	0,759
Attitude	Unidimensional	79,412	0,816	0,764
Health concern	Unidimensional	90,483	0,951	0,795
Environmental concern	Unidimensional	85,453	0,901	0,858
Involvement	Unidimensional	93,117	0,853	0,860
Buying Intention	Unidimensional	77,259	0,911	0,853
Buying behavior	Unidimensional	92,190	0,900	0,799

Hypothesis testing:

In order to test the hypotheses, we used simple regression. The results showed that the perception has a positive and significant effect on the attitude ($\beta = 0,351$, $T=5,442$, $p=0,000$). Thus H1 is supported. The links between attitude/buying intention and attitude /buying behavior were significant are respectively ($\beta = 0,311$, $0,305$; $T=7,496$, $4,996$; $p=0,000$). Thus, H2 and H3 are fully supported. No impact of involvement on buying intention ($0,177$; $T=1,014$; $p=0,102$) was identified. Hence, no support is provided for H4. The results showed that the buying intention positively and significantly influence buying behavior ($3,210$, $T=3,415$ $p=0,000$). Thus, H5 is fully supported. No significant effect could be found between involvement and buying behavior ($0,253$, $T=1,426$; $p=0,026$). Therefore, H6 is not supported. A significant and positive relationship was found between health concern/attitude and environmental concern/attitude are respectively ($0,443$, $0,358$; $T=5,442$, $4,441$; $p=0,000$)

providing support for H7 and H8. Furthermore, buying behavior was found to be positively and significantly influenced by environmental concern (0,446, T=3,776; p=0,000). Then, H9 is supported. Finally, health concern was found to positively and significantly impact on buying behavior (0,512; T=2,005; p= 0,000) there by supporting H10.

TABLE 5: The results of the tested hypotheses

Hypothesis	Results
H1: The perception has a positive impact on consumer attitudes toward organic products.	Checked
H 2: The attitude has a positive impact on buying intention.	Checked
H3: The attitude has a positive impact on the buying behavior.	Checked
H4: The involvement has a positive impact on the buying intention.	Not Checked
H5: The buying intention has a positive impact on the buying behavior.	Checked
H6: The involvement has a positive impact on the buying behavior.	Not Checked
H7: Environmental concern has a positive impact on consumer attitudes toward biological products.	Checked
H8: The health concern has a positive impact on consumer attitudes toward biological products.	Checked
H9: Environmental concern has a positive impact on the biological buying behavior.	Checked
H10: Health concern has a positive impact on the biological buying behavior.	Checked

Discussion and Conclusion:

The objective of this paper is to explain the buying behavior of the biological products and based on the theory of reasoned action of Gracia (2007) which evolved the theory of planned behavior (Ajzen and Fishbein, 1991). According to this theory any behavior that requires some planning can be predicted by the intention to have this behavior. In fact, buying depends on the purchasing intention which is a predisposition to purchase. The purchasing intention depends then on the attitude of the consumer. In our case, the intention to purchase of the biological products influences positively the purchase of the Tunisian consumer behavior. Having as basis the theory of reasoned action, consumer buying intention is now influenced by the attitude towards biological products (Juhdi and Ahmat, 2010, and Cracia Magidtris, 2007). In other words, the attitude is one determine purchasing intention. The more favorable one is towards a product, the more the intention to buy it. The conceptual framework of Gracia and Magistris (2007) showed that the attitude contributes to explain the behavior of biological purchase and considering the attitude as being one of the determinants of the

behavior of purchase. According to the work of Bonti-Ankomah and Yiridoe (2006), attitudes towards the biological products are associated with a complex set of ideas, motivations and experiences. They have also shown that the perception contributes to explain the attitude of the Canadian consumer. They add that the beliefs and perceptions are very subjective concepts (Fishbein and Ajzen, 1975). The relationship between perception and attitude must be checked empirically in next studies. Thus, consumer motivation towards the biological products is determined by two types of concern: health and environmental. Von Alvensleben, (1998); Magnusson and al, (2003) have shown a positive impact on the attitude in their research. To synthesize, the main objective of this paper is to describe the factors which influence the buying behavior of the biological products namely: perception, attitude, motivation (health and environmental concerns), the involvement and the purchasing intention. This study could help companies to understand the factors explaining the biological purchasing behavior and encourage them to adopt a green strategy in order to ensure proper market segmentation and proper positioning of the biological products compared to the conventional products.

From a managerial point of view of this research is to identify the determinants of the motivation to purchase biological products in corporate social responsibility context. This research provides managers with relevant criteria they can use to develop the appropriate factors that influence the Tunisian consumer behaviour of biological products such as perception, attitude, motivation (health and environmental concern), implication and purchasing intention and to select the suitable social cause to support, depending on the degree of consumer perception of the credibility of the company.

This research certainly admits limitations. Indeed, at the theoretical level, other concepts or dimensions that are relevant in explaining the buying behaviour such as: the generalization of empirical results including concentration of the survey on a limited geographical area, the use of a single product category, using the sampling method for convenience and the absence of validation of the results by structural equations. In addition, the interesting socio demographic variables such as the educational level and sex can be integrated into the research model as moderating variables. Futures research can also studied the concept of the perceived authenticity of biological products which we talk about real product (Camus, 2002; Grayson and Martinec, 2004) ethnic (Upton, 1996), credible (Bruner, 1994), sincere (Grayson and Martinec, 2004), ethical, natural and durable (Boyle, 2003, Liao and Ma, 2009).

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