The Impact of Label Perception on the Consumer’s Purchase Intention: An application on food products

Nabil Jeddi¹ and Imed Zaiem²

¹ Faculty of Economic Sciences and Management of Tunis, Campus Universitaire - B.P. 248 - El Manar II - 2092 Tunis
² Department of Management at Tunis Carthage University Campus Universitaire Mrezgua - 8000 Nabeul – Tunisia

Abstract

Within a context of fears concerning food raised by multiple crises and uncertainties, consumers naturally seek to reassure themselves as to the various components of food products. Here, certification remains a tool capable of reducing the consumers’ doubts about product quality. This paper will try to provide an overall view on signals of quality, and investigate the different aspects of the consumer's perception of labeled foodstuffs. Through an empirical study involving a sample of 212 consumers, we have been able to determine the degree of importance consumers give labels, and to define the impact of these quality's signals on the consumer's purchase intention.

Keywords: Product quality, Consumer's purchase intention, Label perception, Food products.

Introduction

The progressive opening of frontiers and the development of international trade have exposed both producer and consumer to a wide variety of products and brands of diverse origins. Such a situation has increased the choice opportunities offered to consumers and engaged companies into a fierce competition race. However, when faced with such a plethora of products, the consumer has to be judge and arbitrator (Courvoisier, 2005). Hence, the question to be asked is: which criteria should the consumer rely on to choose the most convenient and satisfying product?

It is a fact that competition between goods and services is strengthening day after day, as each company tries to be different from the other companies, and consumers require more and more information about the products they intend to purchase, which makes this information more intricate each day... In future, within such a context, and as consumers are becoming more and more demanding, a product's identity will prove to be a crucial asset for its success on the market place. Therefore, a label has become one of the most important criteria relied upon to discriminate between products (Giraud, 2005), for a label helps the consumer to evaluate the products he chooses and
reassures him about their quality. A literature review has emphasized the relationship between the consumer and quality, and noted that this relationship is influenced by several factors of change. Indeed, the consumer's rational as well as irrational behavior is conditioned by the events that arise out of certain economic conditions (Tavoularis et al, 2007). On the one hand, economic factors prompt the consumer to take a constrained stand. On the other, beyond the rationality in the consumer's behavior which relies on a cognitive processing of the targeted information, there is an emotional side involving emotional bonds. Thus, it is likely that this information processing becomes easier when the products are labeled. As a matter of fact, Binninger (2005) shows that any product labeling aims at helping consumers reduce their uncertainty towards quality. It should meet their need for reassurance while uncovering the production process of the item.

The goal of this paper, then, is to study the impact of label perception on the consumer's purchase intention, and to analyze the effects on such a relation of some moderating variables, namely the product's implication, the perceived risk and the socio-demographic variables. This will allow us, at a further stage, to draw a number of interesting implications and recommendations relevant to the application of a labeling strategy to foodstuffs.

The Conceptual Framework

Today, the proliferation and the diversity of quality's signals demand that economic actors redefine the concept of labeling and restructure this “jungle of labels” (Courvoisier, 2005). Nowadays, such a concept represents an omnipresent marketing tool which goes beyond the mere identification of a product to try to be a warrant of its quality for the consumer. Labeling seems to be an important concept in the field of marketing. However, there are relatively few academic research works dealing with this concept. Labels could constitute reliable quality certificates, as they are often created by professional organizations but equally by public and parapublic institutions. These labels are aimed at providing consumers with high-quality products with the guarantee of the authorities. In fact, the creation of a label implies the setting of a monitoring system assuring that the actual product corresponds to the defined criteria (Larceneux, 2004). Such a monitoring system is very important when it comes to the credibility of a label for the consumer.

The multiplicity of quality's signals and labels has made their defining more complex, and blurred any attempt to structure their universe. Yet, their classification remains possible thanks to the nature of the information they chart. According to Larceneux (2001), in the future, signals of quality could be qualified by a number of features, namely:

- **Temporal stature**: According to the quality level, two types of labels can be distinguished: technical labels and experimental labels. From a temporal perspective, technical labels are lasting longer than experimental ones.

- **The source**: Labels can have different sources such as: certification independent organizations, consumers’ associations, suppliers, and the producers themselves...

- **Attribution constraints**: These conditions turn essentially around the respect of the terms of reference.

- **Credibility**: There is a strong correlation between the commercial efficiency of a label, of whatever type or nature it is, and the degree of credibility consumers have in it.

1. **The notion of “label-capital” and the perception of a labeled product**

The analyses of the economic literature developed here-above show that the notion of “label-capital”, in the same way as a brand, allows to draw the paths through which a label can have an influence on the consumer's purchase intention. According to Larceneux (2004), the label capital can
be defined as being “a set of associations and behaviors on the part of consumers of labeled products, which favors in a strong and differentiating way the products which are labeled over those which are not”. This definition provides an insight into the label’s potential to influence the consumer’s purchase decision.

1.1 Label influence routes

The literature review has proved the existence of several variables and factors which can influence the label impact on the consumer's purchase intention, whether directly or indirectly. These variables can have a mediating or a moderating effect. Within such a framework, Larceneux (2004) has identified three mediating routes through which the label is likely to influence the consumer's purchase intention.

1.1.1 Perceived quality

In a comprehensive and recent approach, it is possible, according to Sirieix and Dubois (1999), to consider the perceived quality of a product as being "the evaluation made by the consumer relying on the whole set of intrinsic as well as outer dimensions of the product or the service".

In the field of research on quality, Grunert et al, (2001) have shown that the consumer relies on the brands and the labels as indicators of the product's quality. During the research process, the consumer can favor typicity over typicality of the products. Thus, a product's typicity can constitute a competing advantage, in that it allows to differentiate the product and single it out of competition by endowing it with a sense of uniqueness in the eyes of the consumers. This means that, when repeatedly distinguished by the consumer, a product becomes typical. From that moment on, the product's perceived quality can be considered as a mediating variable likely to influence the impact of labeling on the consumer's purchase intention.

1.1.2 Perceived uniqueness

Within the marketing logic of difference, the perceived uniqueness of a product can be defined as “the perception that the product is singled out of the products belonging to the same category” (Larceneux, 2004). In fact, each producer seeks to make his product distinguished and singled out differently in a competitive environment, in order to secure a favorable positioning for his product in the mind of the consumer. This remains possible through a policy of labeling which relies primarily on the differentiation and uniqueness of the product.

1.1.3 Esteem granted to the producer

Larceneux (2004) presents this variable as being “the degree of consideration, confidence and respect which the consumer grants the producer, in comparison with the other products of the same category”. Therefore, the notion of esteem granted the producer is one of the functions of the label as a signal of quality. Thus, the esteem component seems to be general and more abstract inasmuch as it targets the underlying variables of the product rather than the product itself. In fact, by transmitting information about the attributes and the characteristic features of a product, the label equally provides an identification of the producer to the consumer. So, these three dimensions are judicious, not only on the theoretical level, but also on the managerial level. They are, then, at the origin of any competitive advantage, and any benefits or profits. And they allow the label to favor the consumer's purchase intention via three different possible ways.

1.2 The perception of quality and labels

Generally and from the consumer's stand, high quality remains a crucial source of any competitive advantage. However, even high quality is not easy to be perceived. In this case, the label constitutes a reliable identifier of the product, as it informs about the quality of this product. When well perceived and understood by the consumer, the label can improve marketing communication (Grunert et al, 2001). Economic literature has dealt with the question of product labeling from several angles: signaling modes, label sponsoring,
quality level related to label, consumer's perception of quality's signals, etc. Besides, the label's use and role represent an interesting point in the studies dealing with the proliferation of these quality's signals, because the consumer perceives them as an evaluation criterion of products (Grunert et al, 2001). Indeed, within a context of fierce competition and with more and more demanding consumers, the identity of a product has become a fundamental success factor in the market. This identity which is charted by the label makes the consumer's choice easier as it is an important evaluation criterion for the consumer. Nonetheless, Joop de Boer (2003) states that the impact of the label on the purchase decision depends on the way the consumer perceives this signal of quality, on his understanding and the degree of his confidence in the label. Therefore, an efficient labeling strategy can convince the consumer of the difference between labeled products and the others, while allowing him to memorize the label and trust it. Yet, many labels have failed to fulfill their roles for several reasons: either the consumer does not know or understand the signal of quality, or the product's attributes and aspects which are covered by the label are not among the consumer's interests. In the future, and to make sure a label is efficient, it is deeply advised that companies rely on objectives that they can supervise, and assure a follow-up of the label after it is launched, as it is the case with any other marketing tool (Grunert et al, 2001).

1.3 The effect of emotional experience on the perception of a labeled product

Nowadays, research conducted within the framework of the analysis of the effect of the label on the consumer's perception of labeled products is developing. This shows that a signal of quality weighs considerably as an element of product evaluation, and a precious criterion of choice adopted by the consumer (Grunert et al, 2001; Giraud, 2001). Some products, especially foodstuffs, are not only acquired for their nutritional and health benefits, but also as experimental products. This means that the consumer is seeking more the new experience than the mere act of consumption. In this respect, labeled products are different from common (non-labeled) products, in that they are carrying emotions and sensory pleasures which are transmitted to the consumer when he consumes such products (Giraud, 2005).

Therefore, it seems clear, today, that emotional marketing offers a successful marketing tool to companies. However, success depends on the way emotion is raised during the consumption experience (Schmitt, 1999). Such a strategy relies on labeling as a means of communication which allows to carry emotional values offered by the products (Giraud and Trigui, 2005). Yet, the perception of a label alters according to the situation of the consumer. For instance, a loathing of risk-taking on the part of the consumer can influence his perception according to the degree of risk he feels. Thus, these observations allow us to state our first hypothesis:

H.1: The perception of a label has a positive impact on the customer's purchase intention.

2. The influence of the label on the consumer's purchase intention

As we have mentioned previously, a label can be considered as being the most powerful quality signal, which can directly help the consumer decide about buying a product. That's why, it seems judicious to draw attention to the existence of a set of moderating variables which intervene to alter the perception impact of the label on the consumer's purchase intention, namely the product's sectional implication, the perceived risk, and finally the socio-demographic characteristics of the consumer.

We propose to summarize all of these different variables applied in the context of food in the table below:
Table 1: The different variables affecting the perception of labels

<table>
<thead>
<tr>
<th>Authors</th>
<th>Variables</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Moderating variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perceived uniqueness</td>
<td>The perceived uniqueness influences positively the impact of the label on the customer's purchase intention.</td>
</tr>
<tr>
<td></td>
<td>Esteem granted to the producer</td>
<td>The esteem granted to the producer influences positively the impact of the label on the customer's purchase intention.</td>
</tr>
<tr>
<td><strong>Mediating variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fabrice Larceneux (2004)</td>
<td>Perceived risk</td>
<td>The perceived risk favors the appeal of the customer to the label to reduce this risk.</td>
</tr>
<tr>
<td>Gabriel Tavoularis et al (2007)</td>
<td>Socio-demographic characteristics</td>
<td>The socio-demographic variables have a weak weight on the impact of the label on the customer's purchase intention.</td>
</tr>
</tbody>
</table>

2.1 The label perception within a high perceived risk

Most of the research on the consumer’s behavior has deeply investigated the role of the perceived risk in the decision-taking process of the consumer in a purchasing situation. Thus, choice remains the central issue in the consumer’s behavior, seeing that the repercussions of this choice can only be known later. Consequently, the consumer becomes prone to uncertainty and risk, which account for his subsequent anxiety.

Therefore, as in the opinion of Gallen and Cases (2007), it is possible to define the perceived risk according to two components: uncertainty relative to the efficiency of the decision, and the possible losses due to the purchase or the consumption of a product. The more these losses are probable, the higher the perceived risk of the purchase acts. The perceived risk could, then, be seen as a mental construction named representation, which is essentially based on the information perceived by the consumer and integrated in his memory. It is this very representation that creates a need for reassurance in the person. So, the perceived risk can be considered as a necessary antecedent of the need for reassurance.

Several research works have dealt with the perception of risk in a context of a risky consumption act. As a matter of fact, the consumer uses the label as a tool that helps him make his mind, especially when he faces a situation wherein the information is uncertain or asymmetrical. In such a context, Larceneux (2004) shows that the consumer relies on the label to reduce the perceived risk, as the label allows to deal with unknown products and avoid any negative consequences which might ensue from asymmetrical information. Then, as he is looking for a balanced psychic state, the consumer perceives the label as an indicator which makes decision-taking easier. According to several studies in the field, the label seems to correspond to a
reassurance tool adopted by consumers whenever a high risk is perceived. However, other conditions must be secured for the perceived risk to have an impact on the role of the label in the purchase intention, namely, the presence of an asymmetrical information in the quality sign, and the consumer’s loathing of risk. Therefore, most studies conducted in this field show that an individual’s need for a risk-reducing strategy gets more urgent as the perceived risk gets higher. In this case, labeling constitutes a reassurance solution. Thus, we draw our second hypothesis:

**H.2: The higher the perceived risk, the stronger the impact of the label on the consumer’s purchase intention.**

### 2.2 The impact of the situational implication of the product

Even though it has been the topic of several research works, the concept of implication remains hard to define, due to the fact that its causes and consequences are tightly related to the concept itself. In fact, this concept refers sometimes to the consumer, and some other times to the product or to a particular situation related to the purchase of this product (Filser, 1994). Hence, it is analyzed through its antecedents which comprise four or five facets depending mainly on the importance of the purchase, on the perceived risk, on the values of the sign, and on the pleasure linked to the product (Laurent and Kapferer, 1985).

Besides, the same authors add that the existence of the concept of implication is essentially accounted for by the presence of certain dimensions. These are four dimensions: they can be utilitarian, hedonistic (seeking pleasure in the product), social (seeking belonging to a social class identified by the product consumption), and finally a personal dimension (searching self-achievement through the product). Therefore, several attempts undertaken to measure implication have shown that the intensity of this concept alters according to the type of the purchase, that is, according to the category of the purchased product. In this respect, research results assert that when a consumer is faced with a situation wherein implication is strong, he relies on a deep system to solve the problem, while when faced with a weak implication situation, he makes use of a simpler resolution mode. Therefore, his evaluation of the product becomes quicker.

Nevertheless, and despite the gaps surrounding the concept of implication, there exists a consensus about the origin of this concept which stipulates that the implication often referred to in marketing is generated by the perceived risk (Laurent and Kapferer, 1985). As we mentioned earlier, although it is a tricky concept, it is evident that “implication is in fact perceived as an explicative and moderating variable for the analysis of the consumer's behavior, a potential segmentation variable” (Strazzieri, 1994). Besides, the studies conducted on the consumer’s perception of quality signals, especially those dealing with foodstuffs (Giraud and Grunert, 2001), have shown that the perception of a label as a source of information for the consumer differs according to the family and the category of the product, which means that the perception of the quality’s signal depends on the degree of implication of the product. Indeed, when facing a strong-implication product and feeling a high perceived risk, the consumer intensifies his search of information by relying on the product's label. Therefore, the concept of implication has proved to be an unquestionable key factor which determines and influences the consumer’s behavior, and more precisely his purchase intention, in terms of information research, of the identification of the evaluation criteria and choice of products, especially that, nowadays, the consumer faces a plethora of new products and new brands that raise different levels of implication. We can now state our third hypothesis:

**H3: The higher the categorial implication of a product, the stronger the influence of the label perception on the consumer's purchase intention.**

### 2.3 The impact of socio-demographic variables
Among the variables that can influence the nature of the decision-taking processes in consumers, we can cite the set of variables or socio-demographic features which is often used. As a matter of fact, these variables intervene to affect the behavior of people inasmuch as they influence the intensity of perceived risk (the income influences the perception of risk) and the degree of experience (age determines experience) etc. In the same way, these socio-demographic variables allow to describe the tendencies and the preferences of consumers towards certain products (Nantel, 1998). That's how the consumers perceive differently the labels, depending on their socio-demographic features. Research shows that this perception may vary with the consumer's gender, age, and education (Tavoularis et al, 2007). This can be summarized in our fourth hypothesis as follows:

**H4:** The socio-demographic variables influence the relation between the perception of the label and the consumer's purchase intention.

### 2.3.1 Gender

Most of the studies done within this framework have shown that gender has a weak and even neutral influence on the consumer's perception of the label. However, Tavoularis et al, (2007) have shown that women are often more concerned about signals of quality than men, because, as main buyers and housewives, they often go to malls and department stores, consequently they have a direct and permanent contact with labeled products. Thus, we can present our sub-hypothesis **H4.1** which stipulates that:

**H4.1:** The consumer's gender alters the impact of the label perception on the purchase intention in a positive way.

### 2.3.2 Age

According to a few studies, it seems that age has only a limited influence on the perception of the quality's signals by the consumer. However, (Tavoularis et al, 2007) have demonstrated that as the consumer gets older, his motivation to purchase labeled products gets stronger. This leads us to our following sub-hypothesis:

**H4.2:** The age of the consumer moderates positively the impact of the label perception on the purchase intention.

### 2.3.3 The Level of education

Besides, concerning the level of education, most research seem to agree that an individual who worries about labeling is someone who has a rather high level of education. Indeed, according to an INRA report (Europe, 1996), people who have carried out middle and higher education are much more open and receptive to the concept and policy of labeling than those who only reached primary or lower middle education. Thus, we state our last sub-hypothesis:

**H4.3:** The consumer's level of education moderates positively the impact of the label perception on the purchase intention.

Moreover, it should be noted that the consumer's socio-professional background also intervenes, even if slightly, at this level. In fact, label perception seems more favorable to the consumers who belong to higher socio-professional categories.

In summary of this part, the research model and the relations to be tested appear then as follows:
Methodology

The data we used to test our working hypotheses and meet the objective of our study have been collected through a questionnaire inquiry. The questionnaire was directly presented to a sample of 212 persons aged over 20 and living in the area of Tunis. The inquiry was conducted at store exits. All the scales used in our research find their starting points in precedent studies. They are reliable as well as valid.

Result Analysis

1. Purification of measure scales

For each of the measure scales adopted, we have performed an exploratory factorial analysis (ACP), in order to secure the dimensional structure of the scale. Each factorial analysis displays a KMO value that is superior to 0.5 and a revealing Bartlett test. For each of the factors brought out, we used the Cronbach's alpha to check the reliability of the constructs.
Table 2: The scales measuring variables and coherence of items

<table>
<thead>
<tr>
<th>Theoretical constructs</th>
<th>Nb de dimensions</th>
<th>Nb of items</th>
<th>Measure of the items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>The perception of labels</td>
<td>1</td>
<td>3</td>
<td>Likert scale 5-points</td>
<td>0.695</td>
</tr>
<tr>
<td>The purchase intention</td>
<td>1</td>
<td>2</td>
<td>Likert scale 5-points</td>
<td>0.806</td>
</tr>
<tr>
<td>The implication of the product</td>
<td>1</td>
<td>5</td>
<td>Likert scale 5-points</td>
<td>0.876</td>
</tr>
<tr>
<td>The perceived risk</td>
<td>1</td>
<td>4</td>
<td>Likert scale 5-points</td>
<td>0.900</td>
</tr>
</tbody>
</table>

The results show that all the scales of the adopted constructs are one-dimensional and deeply reliable, except for the label perception scale which displays a Cronbach’s alpha that is well under the norms (0.8 according to d’Evrard et al, 1993).

2. Checking hypotheses

After purifying the measure scales, we proceeded with a checking of the hypotheses of our research. We used two types of analysis: linear regressions and variance analysis.

2.1 Checking the effect of label perception on the purchase intention

In order to study the impact of the label perception on the consumer’s purchase intention, we proceeded with a linear regression analysis. The regression model is revealing ($F=146,886; P=0.000$). It allows to explain 41.2% of the variance of the label perception on the purchase intention, ($R^2=0.412$). The analysis of the regression coefficient shows that the label perception (X) has a positive effect on the consumer’s purchase intention (Y), ($t=12.120; p=0.000; B=0.641$). The regression equation is written as follow:

$$Y=0.004 + 0.641X$$

Thus, we confirm our hypothesis H1 which stipulates that the label perception has a positive impact on the consumer’s purchase intention.

2.2 Checking the moderating effect of perceived risk on the relation between label perception and the consumer's purchase intention

In order to determine the moderating effect of perceived risk on the relation between label perception and the consumer’s purchase intention, we applied a linear regression in which the purchase intention (Y) was regressed on the label perception (X), on the perceived risk (Z) and on the product of these two variables (XZ). The results show that the global model is revealing ($F=80,888; p=0.000$) and allows to explain 53.2% of the total variance ($R^2+0.538; adjusted R^2=0.532$). Therefore, the regression equation is written as follows:

$$Y= 0.036 + 0.340 X + 0.263 Z + 0.163 XZ$$

The results show the presence of a simple effect of label perception ($t= 5.471; p=0.000; B=0.340$) and of perceived risk ($t= 4.346; p=0.000; B= 0.263$), together with the effect of the interaction of these two variables ($t= 4.121; p=0.000; B= 0.163$). It seems from the regression equation that as the perceived risk increases, the slope becomes straighter, and therefore the impact of the label perception on the purchase intention becomes stronger. This leads us to confirm hypothesis H2, and to conclude that the perceived risk moderates in a positive way the impact of the label perception on the consumer’s purchase intention.
2.3 Checking the moderating effect of the product implication

In order to determine the moderating effect of the product implication on the relation between the label perception and the consumer's purchase intention, we applied a linear regression in which the purchase intention (Y) was regressed on the label perception (X) and on the implication (Z), as well as on the product of these two variables (XZ). The results show that the global model is revealing (F= 77,774; p= 0,000) and allows to explain 52.2% of the total variance (R two= 0,529, adjusted R two= 0,522). Hence, the regression equation is written as follows:

\[ Y = 0,037 + 0,251 \times X + 0,286 \times Z + 0,154 \times XZ \]

The results show the presence of a simple effect of the label perception (t=3,479; p= 0,001; B= 0,251) and of the implication (t= 3,919; p= 0,000; B= 0,286), as well as an effect of interaction of these two variables (t=3,767; p=0,000; B=0,154). It appears from the regression equation that as the product implication increases, the slope becomes straighter. Therefore, the impact of the label perception on the purchase intention becomes stronger. We, then, confirm the third hypothesis H3 that stipulates that the product's sectional implication moderates the impact of the label perception on the consumer's purchase intention positively.

2.4 Checking the moderating effect of the socio-demographic variables

To test the moderating effect of the socio-demographic variables, we conducted a number of linear regressions in sub-groups.

2.4.1 The effect of gender

At this level, we reproduced analysis (2.1) dealing with one sub-group after the other (men and women). These analyses show that there exists, for each sub-group, an important relation for men (t=8,228; p=0,000; B=0,624) as well as for women (t=8,679; p=0,000; B=0,651), yet it is stronger for women.

We can thus conclude that our hypothesis H4.1 stating that gender moderates positively the impact of the label perception on the consumer's purchase intention is confirmed.

2.4.2 The effect of age

In the same way, to study the effect of age, we have reproduced analysis (2.1) while proceeding with sub-groups for the following three age brackets ([20-30]; [30-50]; [over 50]). These analyses through sub-groups show that for the following age brackets: [30-50] and [over 50], there exists an important relation (respectively: t1= 10,126 and t2= 6,090; p1= p2= 0,000; B1= 0,773 and B2= 0,763 for both sub-groups). However, for the sub-group [20-30] there is a weak effect of the impact of the label perception on the purchase intention (t=2,533; p= 0,04; B= 0,275). This implies that adults and older persons are more interested in labels than younger persons, as they are more informed about and conscious of labeling. These observations allow us to confirm hypothesis H4.2 which stipulates that age moderates positively the impact of the label perception on the consumer's purchase intention.

2.4.3 The effect of the educational level

Sub-group analyses related to the level of education (primary, secondary and higher education) show that for secondary and higher education, there is a strong correlation between the label perception and the purchase intention, respectively (t=6,615; p=0,000; B= 0,612) and (t= 9,451; p=0,000; B= 0,712), whereas for the sub-group corresponding to the primary education level, the relation has no significant effect. Thus, we can conclude that the higher the educational level of the consumer, the stronger the correlation between the label perception and the purchase intention. We can then confirm hypothesis H4.3 which states that the educational level influences positively the impact of the label perception on the purchase intention of the consumer.
In conclusion, the results of the tests of the different hypotheses of our model could be summed up in the table below (Table 3):

<table>
<thead>
<tr>
<th>HYPOTHESIS</th>
<th>CHECKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>The label perception has a positive impact on the consumer's purchase intention.</td>
<td>Confirmed</td>
</tr>
<tr>
<td>The higher the perceived risk, the stronger the impact of the label on the consumer's purchase intention.</td>
<td>Confirmed</td>
</tr>
<tr>
<td>The higher the categorial implication of a product, the stronger the influence of the label perception on the consumer's purchase intention.</td>
<td>Confirmed</td>
</tr>
<tr>
<td>The consumer's gender moderates the impact of the label perception on the purchase intention positively.</td>
<td>Confirmed</td>
</tr>
<tr>
<td>The consumer's age moderates the impact of the label perception on the purchase intention positively.</td>
<td>Confirmed</td>
</tr>
<tr>
<td>The consumer's educational level moderates the impact of the label perception on the purchase intention positively.</td>
<td>Confirmed</td>
</tr>
</tbody>
</table>

**Discussion and conclusion**

The main objective of this paper was to study the consumer's perception of labels and signals of quality, and to bring in a reflection on the consumer's tendency to acquire labeled products. For this, we have tried to understand and define his behavioral attitude towards these products. The theoretical contributions are anchored in the introduction of the variables of the perceived risk and the product implication as moderators of the relation between the label perception and the consumer's purchase intention, and not as mediators, as it was the case with most of the previous research works.

Our results confirm the most recent works of Larceneux (2004); Giraud (2001); Grunert et al, (2001); Courvoisier (2005) and Tavoularis et al, (2007), and prove that the higher the perceived risk and the product implication are, the stronger the impact of the label perception on the consumer's purchase intention. Indeed, within a situation of risky consumption caused by the variety of products and their sources, diseases... the consumer looks for the means that could reduce this risk. Labeling remains a solution of reassurance for the consumer and helps him take a decision. Besides, in a situation of high implication, the consumer tends to look for information to comfort himself and make the right choice among a set of products belonging to the same category. Our results show that, in this case, the label perception affects the consumer's evaluation system and influences his purchase intention positively.

Also, it is important to say that the perception of labels and its impact on the intention to buy vary significantly according to gender, age, and the educational level of the consumer. Our results are coherent with those drawn from other studies which have already shown that women having achieved higher education are the most sensitive people to labels. Indeed, it is proved that label perception and its impact on consumers' purchase intention are much more present in women, who are considered to be the first buyers of foodstuffs, and in adults with a high educational level (secondary or higher). The latter seem to be better informed on signals of quality and labels, and therefore, they react more than younger and less educated persons. The results of the national inquiry on the
position and the perspectives of trade in Tunisia, conducted in July, 2004 by the Ministry of Commerce, have already shown that the Tunisian people care about the labels of the products they buy. In fact, 62% always read labels, 28% often and 10% rarely do. The Tunisian consumer is becoming more and more attentive, sensitive and aware of the importance of a labeled food consumption that is in accordance with the norms. Consequently, a label can help him evaluate the products and brands through the social, economic and environmental information which it carries.

From a managerial point of view, the paper sheds light on the action leverage that producers have to consider in order to reinforce the impact of labeling strategies. Indeed, for producers, a label remains a genuine tool of consumer motivation, a mirror that reflects the image of the company (in terms of ethics, respect of the environment, etc.), and a pretext that accounts for the high prices of products.

People's lifestyle in the Maghreb has changed in terms of food, physical activity (a phenomenon referred to as nutritional transition). This has led to the emergence of certain diseases (obesity, non-transmissible diseases, type 2 diabetes, some cancers, heart diseases)\(^1\). In this case, a labeling strategy constitutes a good prevention solution. For this, producers and promoters of labeled food products should care more about the promotion of their products, through communication, by sticking bigger labels on these products (Courvoisier, 2005), and by relying more on the media to display them and make them more familiar to consumers. The setting of a strong, powerful and credible labeling strategy will, in the long run, create satisfaction in the consumers and prompt their faithfulness.

**Limits and future research perspectives**

Despite its interesting results, this study suffers some limits which should be carefully taken into consideration when generalizing the empirical findings reached. Among these limits, we cite the fact that the study only covered the area of Tunis through a convenience sample. Consequently, it is not representative of the attitude of all the Tunisian consumers, and does not allow for any generalization. Also, the study targeted foodstuffs only; it would be worthwhile to push this kind of research further and cover other categories of products (industrial products, for example). Moreover, we did not go beyond the purification of the measure scales and the checking of the links between concepts. In this respect, it would certainly be interesting, in further studies, to validate the hypotheses and the model on new data, through the application of the structural equation method.

Nonetheless, this study opens up new horizons over potential fields of investigation which could be the subject of future research, with the proposition of a more integrating model, comprising the different determinants that affect label perception more deeply, and with the introduction of new variables that contribute to better explain the correlation between label perception and the consumer's purchase intention. In fact, other moderating variables could be integrated, such as the purchase situation and the product's category. Also, this study has considered the effect of the label on the purchase intention, the effects of the image and the emotional behavior could, then, open new future prospects for the label's efficiency.

**References**


\(^{1}\) Professor Jalila El Ati, National coordinator of the Obe Maghreb- INNTA project (2009), Comprendre la transition nutritionnelle en Tunisie et au Maroc, leaders.com.tn


