

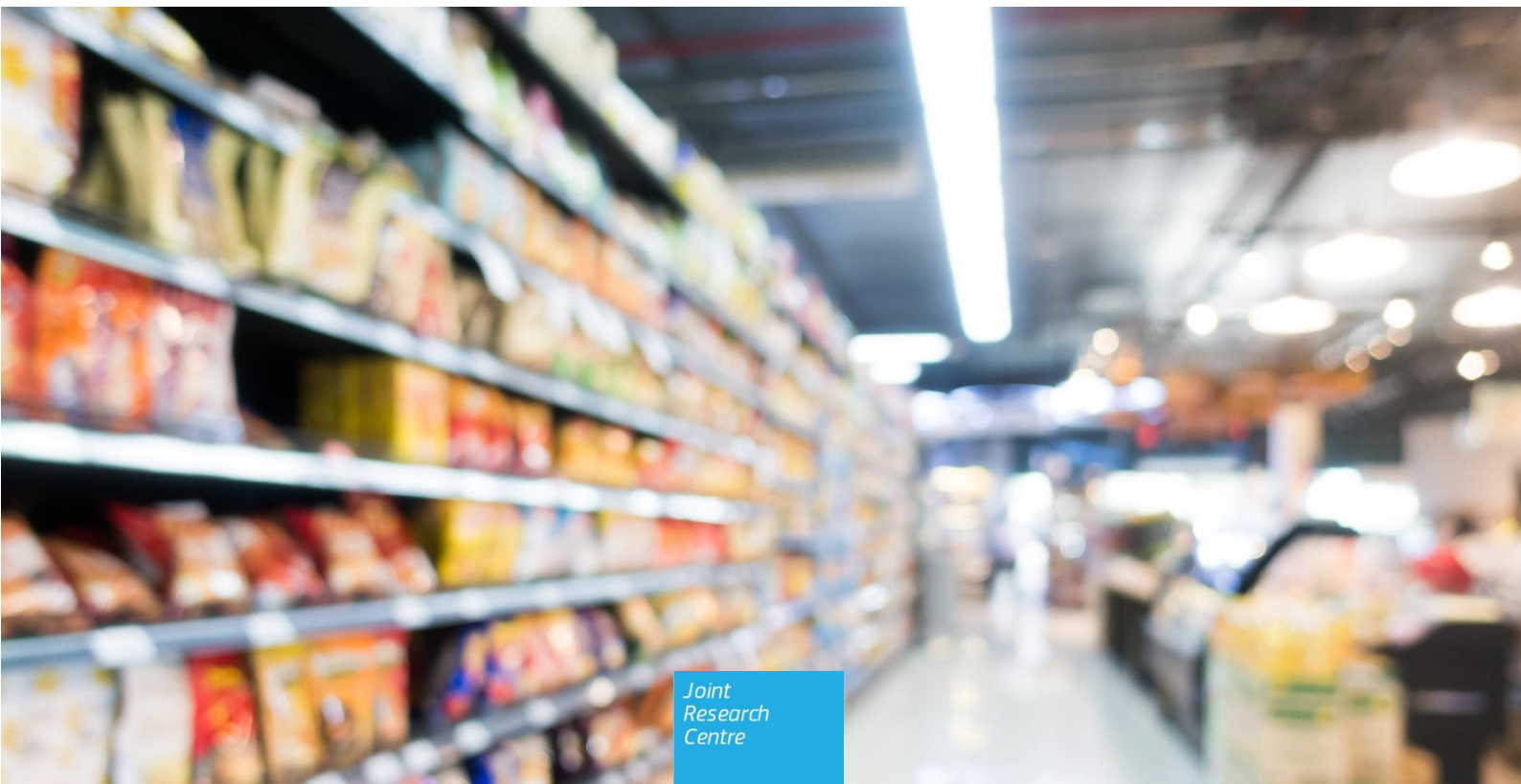
# Economic rationale behind differences in the composition of seemingly identical branded food products in the Single Market

*A review of the literature*

**Editors:**

Carlo Russo, Luisa Menapace, Marcello Sansone

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## 4 How DC-SIP influences the purchase intention? Analysis of factors affecting perceived quality

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### Summary

This project aims to identify factors affecting quality perceptions of agri-food products by consumers in order to analyse which cues/attributes should be considered regarding the issue of differences in composition of seemingly identical branded food products because they play a relevant role in the construction of perceived quality, and therefore in the purchase intentions and decisions taken by consumers.

Despite being a complex topic, the concepts of quality and perceived quality play a relevant role in European consumption dynamics due to the multidimensionality of the characteristics and attributes of each product, in particular, agri-food products.

From the point of view of marketing management and consumer behaviour, quality seems to be linked to complex factors related to the satisfaction of consumer preferences that determine the decision to buy or not buy. Consequently, these variables go beyond the intrinsic or technical characteristics of the product.

Therefore, the concept of quality cannot be traced back to an objective dimension only, but to a connection between objective and subjective variables that determines the competitiveness of the food product. Over time, different approaches have been used to study perceived quality and its role in consumer purchase choices: the information economy approaches, multi-attribute approaches, hierarchical approaches, and integrative approaches.

One of the first approaches, developed by Nelson in 1970, is the information economy theory that divides products into *search* and *experience* on the basis of the effort that each consumer makes to find information: the quality of *search* product is measurable before the purchase through the acquisition of information whereas measuring the quality of the *experience* goods before the purchase is objectively impossible.

The second approach - the multi-attribute one - is an evolution of the information economy approach and considers that consumer evaluation is based on quality cues. This approach involves a distinction between intrinsic and extrinsic attributes: intrinsic attributes concern physical aspects of the product, their modification leads to a physical

modification of the product; extrinsic attributes are not part of the physical product (e.g. price, packaging, or brand).

The third approach - hierarchical approach - studies the quality concept from a subjective point of view by using the means-end chain, a tool for understanding how consumers establish the links between what they perceive about the physical characteristics of the products and the reasons that lead them to purchase.

Considering the previous approaches (information economy, multi-attribute and hierarchical ones), the Total Food Quality Model uses two dimensions to measure the food quality: horizontal and vertical dimensions. In the horizontal dimension the model divides the perceived quality process into two times (before and after purchase); the vertical dimension considers a distinction between intrinsic and extrinsic quality cues.

Lastly, the integrative approach divides the qualitative characteristics that contribute to defining an overall judgment of the quality of a product in quality cues and quality attributes. A *quality cue* is an attribute of the food product which can be perceived before purchase and consumption and which is believed to be indicative of its quality; *quality attributes* are those product attributes used by consumers to determine the quality after the consumption of the food product and can be divided into *experience attributes* - determined before and during usage (e.g. taste) - and *credence attributes* - based on beliefs (e.g. the product is a healthy one) (Tijssens et al., 2001). This model is based on the distinction of two different moments for the formation of the perceived quality: before the purchase the consumer perceives an expected quality through the quality cues, after the purchase, the consumer has a perceived experienced quality that he or she estimates through quality attributes (experience and credence attributes). The acquisition of a quality cue depends on a number of factors including the availability of time and the ability of the consumer to process the information, for example, on the basis of the cultural and educational level of the consumer.

Therefore, in order to understand the process of consumer perception of quality, it is important also to consider studies about consumer behaviour and the factors that influence the purchase motivations. Because of the complexity of studying consumer behaviour, it is difficult to make an exhaustive list of all factors that affect the consumer buying process of foods product, but it is useful to consider the four main types of factor influencing consumer behaviour: cultural, social, personal, and psychological.

Considering what has been discussed so far on the perception of quality in agri-food, the most appropriate approach to studying the issue of DC-SIP and the main factors to be included in the analysis seems to be the integrative one as it fully considers the process of purchase or re-purchase and cues, attributes, and external factors.

Therefore, it is important to understand which key cues/attributes to consider in the purchase of agri-food products and in the issue of DC-SIP.

For this purpose, the literature was reviewed to analyse models and factors used by the prevailing literature to study the concept of perceived quality for food products. The search was made on the Web of Science, using the keywords "perceived quality" and "food" as the topic of the paper. The analysis of the first 50 search results by relevance in terms of citations led to the identification of 6 key elements in cues/attributes of perceived quality: price, packaging and labelling, brand, origin, healthy, organic, and intrinsic factors.

These six factors are quality cues (intrinsic and extrinsic) before the purchase of the product which the consumer, through an inference process, uses to formulate an expected perceived quality.

The role of these six factors does not end after the first purchase or consumption of the product: those that were cues become attributes to determine the perceived quality experienced before a possible re-purchase; the intrinsic factors (which before the purchase were mostly visual) become taste or organoleptic characteristics linked to the tasting; the other 5 factors (credence ones) continue to play a key role in the construction of consumer perception of quality, which despite being experienced, remains a subjective perception construction. At each purchase and on the basis of each consumption, the quality attributes can be transformed and the effect on the level of perceived quality can vary.

The complexity of this phenomenon is linked to the fact that the factors (cues and attributes) systematically affect the perception of quality and therefore the intentions to purchase/re-purchase because each factor is correlated to the others (for example the brand influence, and is influenced by the price or the country of origin).

It is important to understand the role of each factor in terms of DC-SIP and how the eventual consumer information of the double level of quality will affect each factor and therefore the decision to purchase. The non-information of the consumer essentially certainly affects the intrinsic factors of the product. On the other hand, the information of the DC-SIP will affect the trust in the brand and - *depending on the reasons for the purchase* - the tribe effect of the brand, the country of origin, and the halo effect of the country, and the perception of food as being healthy. In other words, it could affect all the main credence attributes.

## 4.1 Introduction

This study analyses the factors affecting quality perception of agri-food products by consumers. The aim is to understand what the factors that should be considered in the issue of DC-SIP are, because their role in the construction of perceived quality and, therefore, in purchase intentions is relevant.<sup>30</sup>

Considering this objective, the first part of this study explains the theoretical background of the themes of quality, perceived quality, and the different approaches/models used by scholars to analyse these themes (Information economy approach, Multi-attribute approach, Hierarchical approaches, Integrative approaches, and the Total Quality Model).

A specific review of the literature is then carried out with the aim of analysing models and factors used by the prevailing literature to study the concept of perceived quality of food products. In particular, research is carried out on the Web of Science using the keywords "perceived quality" and "food" as the topic of papers, the first 100 papers in terms of citations are analysed and 50 papers are selected for their pertinence in the

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<sup>30</sup> For a more detailed analyses of the impact of DC-SIP on consumers' purchase choices and welfare see Colen et al. (2019).



research area). This methodology leads to the identification of the main factors influencing the perception of quality of food products.

The complexity of the food product purchasing process generates the need to introduce even the most important concepts about consumer behaviour, with the aim of understanding which characteristics influence the purchasing intention of consumer, that is, the characteristics related to the person (personal, social, cultural, and psychological factors), factors related to the macro environment, and the context, motivations, and nature of the need.

This has led to realising that it is not only the organoleptic characteristics and raw materials (intrinsic cues/attributes) of a food product that influence consumer perception of quality and intention to purchase, but that a system of factors is involved and used by consumer as cues/attributes to estimate the product quality. The literature underlines the impossibility of generating an exhaustive and complete list of factors that determine consumer perceptions of quality and the impossibility of quantitatively measuring the weight of each factor on the perception of quality, especially when considered individually. In addition, the effect of the factors on the purchase intention of the consumer being a systemic one, which means that the factors both influence themselves and directly affect the perception of quality.

However, the proposed methodology has led to the main critical factors influencing consumer perceptions in the DC-SIP issue being identified. Beyond the organoleptic characteristics, price, brand, country of origin, health, organic, packaging, and labelling have been considered. A paragraph on each of them is presented in order to understand the role it plays in consumer behaviour and in the process of building the quality perception. Finally, why this is relevant to the DC-SIP issue is discussed.

## **4.2 Quality, perceived quality, and models: theoretical background**

The quality topic plays an important role in competitiveness of agri-food companies and in the consumption trend of the European market.

The definition of quality is still complex although it is a topic widely discussed in the reference literature (Ertekin and Aydin, 2010; Baker, 1995; Sumutka and Neve, 2011; Flynn, Schroeder, and Sakakibara, 1994; Hitt and Hoskisson, 1997). The main problem arises from the multidimensional nature of the concept and of the features and attributes of each agri-food product. Going beyond the legislation, the concept of quality seems to be the summary of images and characteristics of a product or service which could satisfy consumer needs. So the quality is strictly linked to consumer preferences through the decision to buy or not to buy taken by the consumer. While contributing to a clarification of the concept, none of the definitions can be considered to be exhaustive. In fact, they are simply analysed from different perspectives. One of the main definitions of quality is by Deming (1994): "*A product or a service possesses quality if it helps somebody and enjoys a good and sustainable market*".

The concept of quality is analysed from objective and subjective perspectives in economic and management studies. The physical characteristics of the product and their agreement from engineers and food technologists defines the objective quality. The quality perceived by consumers is the subjective quality. The economic importance of

quality lies in the connection between the objective and the subjective quality. In fact, the ability of producers to make the physical characteristics of product meet the wishes of consumers and the possibility of consumers finding the wished for qualities in the product determine quality as a competitive parameter for food producers (Grunert, 2005). Over time, studying the purchase choices in agri-food made by consumers, scholars have used different approaches (Grunert, 1997): the information economy approach; multi-attribute approach; hierarchical approaches; and integrative approaches. Each approach considers a product as a set of attributes (Lancaster, 1966).

#### **4.2.1 The information economy approach**

The information economy approach is one of the key concepts explaining the structural changes in the modern economy. This approach can be used to measure quality as the intensity of the attributes of a product. The analysis focuses on the discovery of these attributes in the presence of asymmetric information. The Market may fail when consumers cannot evaluate the attributes perfectly.

One of the main contributions to the development of the Information Economy Approach has been made by Nelson (1970). His model derives in part from that of Stigler (1961) according to which the consumer is involved in a search process that presents costs related to information research. He argues that the consumer stops searching for information on the product when the cost of the research equals the expected return.

Nelson divides products in *search* and *experience* on the basis of the effort that each consumer makes to find information. The quality of the *search* product is measurable before the purchase through the acquisition of information. On the other hand, *experience* goods are products whose evaluation of the quality before the purchase is objectively impossible. For this kind of good, the quality is evaluable after consumption. This category of good also includes those whose cost, linked to the search for information, is very high until it exceeds the product price, and products whose quality evaluation process is very complicated. Many products have both search and experience attributes. For example, search attributes are the price, the colour, and the appearance while the taste and the freshness are experience attributes.

The Nelson theory was extended by Darby and Karni (1973) who introduced a third type of attribute. Credence attributes are those whose existence cannot be verified even after consumption. Two typical examples of credence attributes are related to the animal breeding system (Intensive/non-intensive) or to the type of feeding (example: biological feed) (Darby, Karni, 1973). It is possible to divide the characteristics of search, experience, and credence products on the basis of the amount of costs that the consumer has to assess the quality before and after the purchase of the product (Krouse, 1992; Moser et al. 2011).

#### **4.2.2 Multi-attribute approach**

An evolution of the previous approach is that consumer evaluation of the product is based on the quality cues.

Olson and Jacoby (1972) distinguish intrinsic and extrinsic attributes. The former differs from the latter because they concern physical aspects of the product; their modification leads to a physical modification of the product. Examples of intrinsic qualities are colour, appearance, and thickness. The extrinsic quality cues are, for example, the price, the brand, and the country of origin.

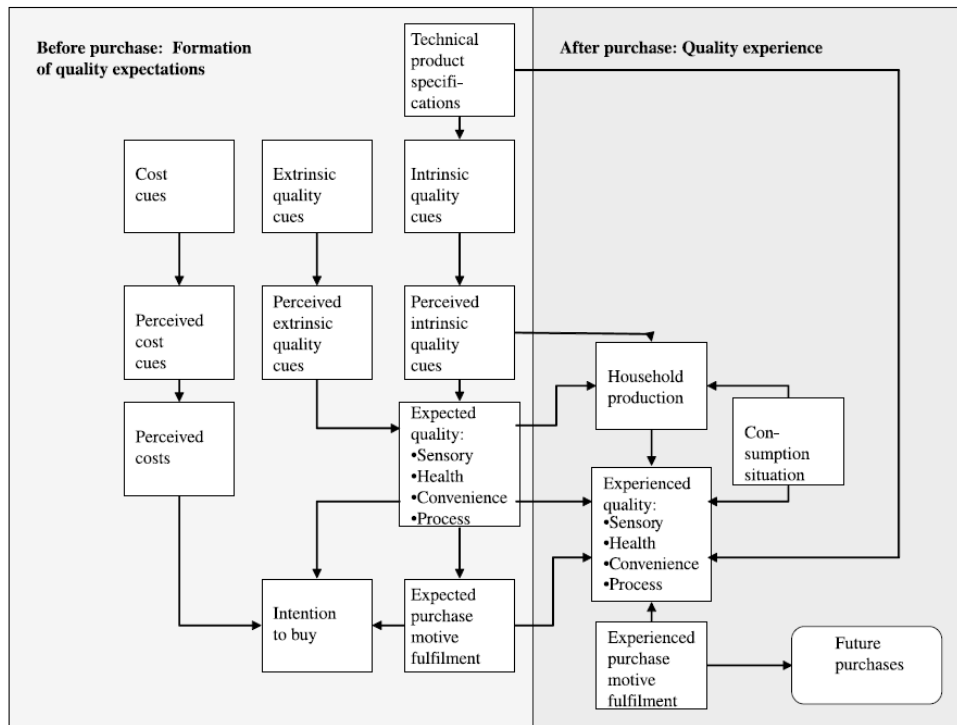
In one of their studies, the two authors examined the importance that consumers give to attributes in order to judge the quality of a brand (Olson and Jacoby, 1972). The study highlights the greater importance given by consumers to the intrinsic attributes of products. However, this model does not consider the possible relationships between the various attributes and the possibility that the consumer can notice the presence of an attribute through the observation of another (Grunert, 1989).

#### **4.2.3 Hierarchical approaches**

The previous approach provides insight into the quality perception process. The hierarchical approaches deepen the issue of quality perception and try to analyse quality from a subjective point of view. It is built on the *means-end chain*. The means-end chain is a tool for understanding how consumers establish the links between what they perceive the physical characteristics of the products to be and the reasons that lead them to purchase the product. More precisely, the construction of the hierarchical map of values requires the construction of the means-end chain, which highlights how "product characteristic (concrete or abstract) is linked to consequences (functional or psychosocial) of consumption, which in turn may be linked to the attainment of life values (instrumental or terminal)" (Grunert, 1997).

The means-end chain represents a conceptual model that interprets the decision-making process of consumers, relating product knowledge to self-knowledge, considered as the knowledge of the consumer needs by the same consumer (Gutman, 1982). The model assumes that consumers choose a product because of its ability to yield the desired effects, and indirectly to satisfy certain personal values. The attributes of the product represent the "means" that the consumer uses to reach a certain "end".

Figure 4-1: The Total Food Quality Model



Source: Brunsø et al. 2002

#### 4.2.4 Total Food Quality Model

The total Food Quality Model (Figure 4-1) is a model with two dimensions (horizontal and vertical), and was inspired by the approaches previously examined: the information economy approach, the multi-attribute approach, and the means-end chain.

In the horizontal dimension the model divides the perceived quality process into two times: before and after purchase.

Furthermore, it is important in this case to consider the distinction between experience and credence attributes. Focusing on repeatedly purchased agri-food products, it is therefore appropriate to make a distinction between two different conditions: first purchase and subsequent purchases. The two phases considered by the model – *before and after purchase* – represent a simplification. In fact, continuous purchasing may result in a change in quality perception by the consumer over time. The biggest change about quality perception occurs in connection with the first purchase. During the first purchase, consumer is influenced by informational cues only; it represents the first experience with the product and may cause changes in the perception of quality.

In the case of first purchase, the consumer considers the quality expectations through the observed characteristics (vertical dimension of the model). If the consumption experience corresponds to the expectations, there are the conditions for the consumer to repeat the purchase. In subsequent purchases, quality expectations originate from the consumer experience. The frequent consumption of a product results in the

activation of a learning process, which in fact allows for increasingly higher quality expectations.

About the experience attributes, they come from the situations of consumption that may change over the time. On the other hand, when the information about quality become available, the credence qualities attributes can always change causing a change in quality perception.

In the mind of a consumer quality has a dimension and a weight that change over the time. This quality dimension, affected by owner experience, acquires a greater weight through time. For example, the attributes of taste and healthiness in the pre-purchase phase may have the same weight in the mind of the consumer, but in the period after purchase and during consumption taste may have a higher weight than healthiness. The healthiness attributes are still conceptual and based on information.

The attributes defining perceived quality and the inference-making are also important in understanding the quality differentiation. Companies need to communicate the differentiated qualities to consumers; consumers need to evaluate quality by inferring from of several complex attributes.

#### **4.2.5 Integrative approaches**

These approaches are also based on the concept that the perceived quality of a product is a function of two distinct time phases: before and after purchase. Based on these two moments, Steenkamp (1989) divides the qualitative characteristics that contribute to defining an overall judgment of the quality of a product in quality cues and quality attributes. Before purchasing, individuals form an opinion of the quality of product, which is called 'expected quality', that is based on *quality cues* of the product. A *quality cue* is an attribute of the food product which can be perceived before purchase and consumption and which is used by consumers to build the perception of expected quality.

After purchasing and consuming the product, the quality perceived is called 'experienced quality'. In this case the quality perception is due by quality that can be divided into *experience attributes* - determined before and during usage (e.g. taste, freshness) - and *credence attributes* - based on beliefs (e.g. brand or country of origin).

The consumer proceeds to collect and categorise the quality cues (Steenkamp, 1989) that will serve to infer the quality attributes of the products. The quality cues are divided into intrinsic and extrinsic (Olson, Jacoby, 1972). The former differs from the latter because they concern the physical aspects of the product in the sense that their modification leads to a physical modification of the product.

The acquisition and categorization of quality cues depends on a number of factors including the availability of time and the ability of the consumer to process the information taken from the quality cues, which for example depends on the cultural and educational level of the consumer (Steenkamp, 1989).

The model of quality perception developed by Fernqvist and Ekelund (2014) combines the studies of Steenkamp and Van Trijp (1996), Steenkamp (1990), and Olson (1977), and clearly summarises what was previously observed. The model shows how the

product is perceived as a set of characteristics that are subdivided into intrinsic and extrinsic. Furthermore, it highlights how the "experiential" quality is formed, which is also influenced by quality expectations. Moreover, these expectations are formed through the process of inference of the intrinsic characteristics of the product, which occurs through the observation of the intrinsic quality cues, while the process of inference on the extrinsic characteristics occurs through the evaluation of extrinsic quality cues.

### **4.3 Consumer behaviour and purchase motivation**

Consumer behaviour is the research branch that studies the place, the reasons, and the manner in which people do or do not buy a product. Engel, Blackwell, and Miniard (2001) define consumer behaviour as 'those activities directly involved in obtaining, consuming, and disposing of products and services including the decision processes that precede and follow these actions'. Therefore, studying consumer behaviour is important for many reasons. It is important for any organisation before launching a product. It is also important to understand the constant changes in the standard of living, trends, fashions, technology, and consumer attitudes towards the purchase of products (Kumar, 2004). Understanding the variations in these factors is important because the marketing of a product mainly depends on these factors.

Before extending the models by including factors that influence consumer behaviour, it is useful to consider the role of consumer behaviour in the marketing process applied by companies. Companies use the information for example about the complex consumer decision making phase obtained through consumer behaviour studies to define marketing strategies, and then elaborate their sales forecasts. In general, companies study consumer behaviour in the market using a sensing process that helps them gain a competitive advantage (Rani, 2014).

Therefore, satisfying consumer needs and wants is the goal of organisations; this is one of the primary goals considered when in the realization of a product or a service, the organisation envisions that factors influencing consumer behaviour.

There are several factors that influence consumer behaviour in particular situation. Generally, consumers differ in age, income, instruction, tastes, and other factors. So consumers engaged in a purchase decision are influenced by these characteristics.

Consumer characteristics include four main factors that are mainly responsible for the different types of behaviours: education, gender, age, and income (Rani, 2014). However, it does not mean that consumers with the same education, gender, age, or income are similar because the influence of the psychological factors varies significantly from individual to individual.

So the four main factors influencing consumer behaviour are cultural, social, personal, and psychological one.

Cultural: Culture is the central factor in the wants and behaviours of an individual developed through socialisation processes with family and other key institutions. Cultural factors have a significant effect on the buying decision of an individual, such as religion or social class (De Mooij, 2010).

**Social:** Consumer behaviour is also affected by social factors such as family, reference groups, status, and social role (Rani, 2014).

**Personal:** Decisions taken by buyers are mainly influenced by personal characteristics such as age, gender, profession, income, and lifestyle (Rani, 2014).

**Psychological:** Psychological factors such as consumer perceptions, beliefs, motivation, and attitudes also have a significant impact on the buyer decision. Motivation is what will drive consumers to develop a purchasing behaviour. Perception is the process through which an individual selects, organises and interprets the information he receives in order to do something that makes sense, and belief is a conviction that an individual has about something. These general factors influence the choices of consumers during the purchasing process (Kassarjian, 1971; Schmitt, 2012).

Therefore, consumer behaviour is a complex, dynamic, and multi-dimensional process, and the environment where a person lives influences their consumer behaviour. So the external factors – such as cultural and social ones – do not affect the decision process directly but these are also instrumental and exert an influence on consumer behaviour. Studying the importance of the psychological process which the consumer goes through during the pre-purchase and post-purchase stages is emphasised by Engel et al. (2001), and it is important in a definition of marketing strategies. These authors study the buyer decision making process and the characteristics of individual consumers as well as groups trying to understand the wants and needs of people. Needs are what is necessary to survive; wants are things that are not necessary for survival but add comfort and pleasure to the life of consumers. The concept of consumer needs and wants is incorporated by Solomon (1996) into the definition of consumer behaviour: 'Consumer behaviour is the process involved when individuals or groups select, purchase, use, or dispose of products, services, ideas or experiences to satisfy needs and wants'. He introduces the idea that consumers may make purchase decisions to satisfy their needs and wants in groups, and not just simply as individuals. This is significant in understanding the role of consumer needs and wants in the purchasing process.

Focusing on the purchasing process of food products, many scholars identify other factors linked with those previously discussed, trying to complete the models on consumer purchase intentions. For example, Stávková and Turčínková (2005), in a study in the Czech Republic, state that routine behaviour (to satisfy the needs) is typical for purchases of breads, rolls, meat, milk, butter, eggs, and some beverages (mineral water, beer, tea, and coffee) while consumers seem to be influenced by other factors such as innovations and advertising when buying foods such as sweets and biscuits, yogurts, cheese, salami, canned meat products, semi-finished products, and some beverages (tea, wine, and mineral water). Consumers, who were strongly interested in their health, purchased cereal bakery products, fish, poultry, yogurts, cheese, and mineral water. When analysing the reasons for changes in consumption patterns, it was demonstrated that the reasons differed according to the affiliation with the individual groups of consumers. There were different reasons for individual social groups, individual age categories, and different localities. If it omits these identification groups, the most frequent reason for changes in consumption patterns in all categories of foods was a healthy lifestyle followed by a wider assortment.

However, because of the complexity of studying consumer behaviour, it is difficult to draw up an exhaustive list of all of the factors that affect the consumer buying process

for food products. Multiple factors are present and vary according to the reference context.

#### **4.4 Factors affecting perceived quality: review of the literature**

This paragraph reviews the literature while at the same time aiming to analyse models and factors used by the prevailing literature to study the concept of perceived quality for food products. In particular, a search was made on the Web of Science using the keywords "perceived quality" and "food" as the topic of the paper, the first 100 papers in terms of citations were analysed and 50 papers were selected on the basis of pertinence with the established research objective. The 50 papers analysed are grouped by factor of influence of perceived quality (Table 4-1).



Table 4-1: Factors affecting perceived quality

<b>Factors</b>	<b>Reference</b>	<b>Product</b>	<b>Effect</b>
<b>Price</b>	Hansen (2005)	shrimps, cheese	+
	Machin, Gimenez, Vidal, Ares (2014)	food	+
	Acebron, Dopico, (2000)	beef	+
	Gilg, Battershill (1998)	agrifood, direct sales	+
	Stavkova, Stejskal, Toufarova (2008)	commodity food	-
	Aschemann-Witzel (2018)	food	-
	Lusk, Crespi, Cherry, Mcfadden, Martin, Bruce (2015)	food	+
	Just, Sigirci, Wansink (2014)	food	-
	Grunert, Bredahl, Brunso (2004)	meat	+
	Grunert, Valli (2001)	beef and yogurt	+
<b>Packaging and labelling</b>	Achilleas, Anastasios (2008)	organic food	+
	Magnier, Schoormans, Mugge (2016)	raisins, ch. bars, coffee	+
	Caporale, Monteleone (2004)	beer	+
	Lange, Issanchou, Combris (2000)	orange juice	V
	Dorneyi et al. (2016)	food	V
	Altintzoglou, Heide (2016)	Norwegian fish	V
<b>Brand</b>	Soberman, Parker (2004)	private labels	+
	Ha, Jang (2010)	ethnic food	+
	Ness et al. (2010)	organic food	+
	Fernqvist, Ekelund (2014)	food	+
	Ozsomer (2012)	food	+
	Anselmsson, Bondesson (2013)	food	+
	Fandos, Flavian (2006)	olive oil and ham	-
	Aurier, De Lanauze (2012)	ice cream, frozen meals	+
	Grunert, Bredahl, Brunso (2004)	meat	+
	Grunert, Valli (2001)	meat and dairy	+
<b>Origin</b>	Aprile et al. (2016)	local food products	+
	Espejel, Fandos, Flavian (2009)	jamon de teruel (pdo)	V
	Bronnenberg, Dhar, Dube (2007)	local branding	+
	Krystallis et al. (2007)	Greek meat	+
	van der Lans et al. (2001)	extra virgin olive oils	+
	Acebron, Dopico (2000)	ternera gallega beef	-
	Chryssochoidis, Krystallis, Perreas (2007)	Greek food products	+

	Fernqvist, Ekelund (2014)	food	+
	Ozsomer (2012)	food and no food	+
	Moskowitz et al. (1997)	turkey	V
	Grunert, Bredahl, Brunso (2004)	meat	+
	Grunert, Valli (2001)	meat and dairy	+
<b>Healthy and organic</b>	Hansen (2005)	shrimps and cheese	+
	Fernqvist, Ekelund (2014)	food	+
	Krystallis, Maglaras, Mamalis (2008)	functional foods	+
	Barrett, et al. (2007)	organic tomatoes	+
	Olsen, Slotegraaf, Chandukala (2014)	green new products	+
	Lee, Hwang (2016)	organic food	+
	Hidalgo-Baz et al. (2017)	yogurt chocolate	+
	Williams, et al. (2012)	fruit and vegetables	+
	Lombardo, et al. (2017)	early crop potatoes	+
	Grunert, Bredahl, Brunso (2004)	meat quality	+
	Grunert, Valli (2001)	meat and dairy	+
<b>Intrinsic factors</b>	Espejel, Fandos, Flavian (2009)	jamón de teruel	+
	Krystallis, et al. (2007)	Greek meat	+
	Acebron, Dopico, (2000)	beef	V
	Jover, Montes, Fuentes (2004)	red wine	+
	Fandos, Flavian (2006)	pdo product	+
	Chamhuri, Batt (2015)	fresh meat and fruits	+
	Martinez-Carrasco et al. (2012)	tomatoes	+
	Coelho, et al. (2015)	fruits wine	+
	Ikeda, Nagai, Sagara (2004)	green tea beverage	+
	Gan, Yan, Linforth; (2016)	cheddar cheese	+
	Anacleto (2014)	bivalve molluscs	+
	Grunert, Bredahl, Brunso, (2004)	meat	+
	Grunert, Valli (2001)	meat and dairy	+

+ indicates a positive effect on perceive quality, -indicates a negative effect, V indicates an undetermined effect

Source: the authors

#### 4.5 Critical factors in the DC-SIP issue: how do they influence the purchasing process?

The analysis of the literature and the topics presented highlight the complexity of consumer behaviour in the purchase of food products. In fact, when the consumer decides to buy a specific product, he is primarily influenced by characteristics related to

the person (personal, social, cultural, and psychological factors). Furthermore, he is influenced by other factors related to the macro environment and the context. The role of the motivations that lead the consumer to the purchase is also important in understanding the nature of the need that determines the purchase (for example, within Maslow's hierarchy of needs) or what wants the consumer has and the advantages they seek.

All this makes it impossible to generate an exhaustive and complete list of factors that determine consumer perceptions and how perceived quality is constructed.

Certainly, the present research shows that even after the first purchase, consumer perception of the quality of a product is not only influenced by intrinsic attributes and the organoleptic characteristics of the product, but a series of credence attributes are involved that the consumer uses to estimate the product quality.

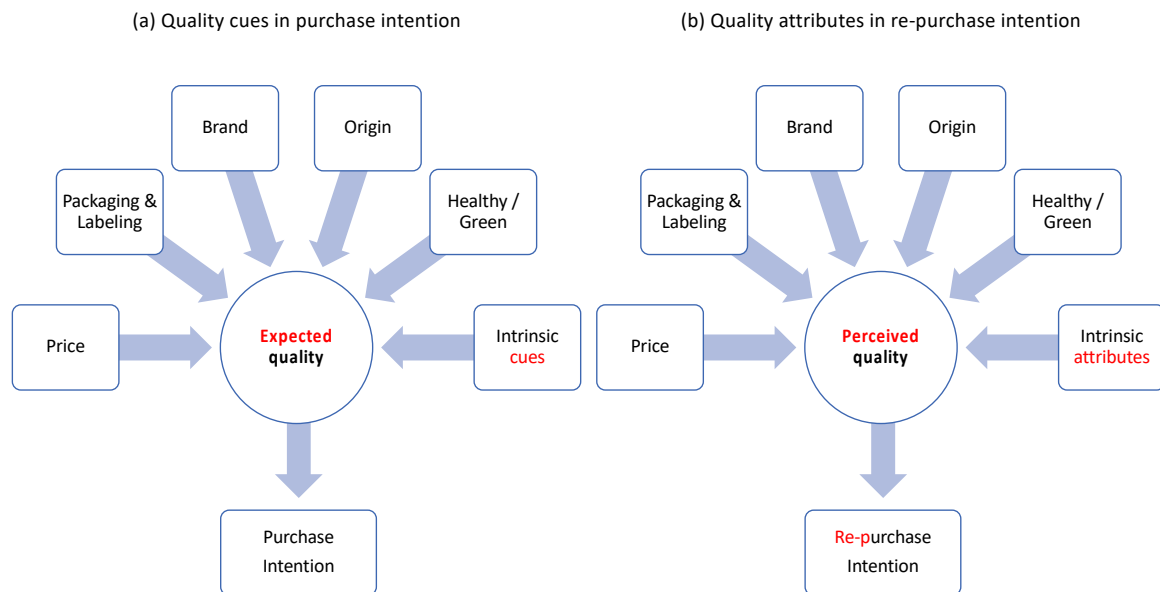
The methodologies used in the reference literature highlight the impossibility of quantitatively measuring the weight of each factor on the perception of quality, especially when taken individually. The effect of the factors on the purchase decision of the consumer is systemic, which means that as well as directly influencing the perception of quality, the factors influence themselves.

In analysing the problem of DC-SIP, it is important to consider what the main factors that influence the perception of quality by the consumer are, using the literature to understand the role they assume in the process of purchasing food products.

The literature review about the models to analyse the perceived quality (Tab. 1) is used to select the factors affecting the quality in agri-food products, in the first purchase, and in the re-purchase phases.

In the case of first purchase, the perceived quality is estimated by the consumer through intrinsic cues (mostly visual) and extrinsic cues (price, packaging and labelling, brand, origin, health, and organic) (Fig.2). In contrast, in the case of re-purchase, the quality perceived by the consumer becomes experienced, the intrinsic cues become intrinsic attributes such as taste or organoleptic characteristics linked to the tasting. The other 5 factors continue to play a key role in the construction of consumer perception of quality, which despite being experienced, remains a subjective perception construction (Fig. 3).

Figure 4-2: Quality cues for purchasing decisions and quality attributes for agrifood product re-purchasing decisions



#### 4.5.1 Price

The company uses the price to summarise the value built for the consumer. Having the consumer as a reference, the company should first reflect on price sensitivity and on the variation in demand when there is a price change. The setting and formulation of price policies related to the determination of consumer value must be based on a preliminary analysis of the value. The value is relative because it is continuously subject to comparison with competing product offerings; it is dynamic because the perceptions that determine it are subject to constant change; and it is multidimensional because it consists of a set of heterogeneous factors that are summarised in costs and benefits. From the point of view of the consumer, the price is a major factor impacting on purchases that also influences decisions in store (Dolekoglu et al., 2008; Batra, Sinha, 2000; Pauwels, Hanssens, Siddarth, 2002; Ailawadi, Pauwels, Steenkamp, 2008; Danziger, Hadar, Morwitz, 2014).

Perceived price is what the consumer sacrifices for the purpose of acquiring a product (Zeithaml, 1988). Consumers may know the exact price of a product purchased or just remember (encode) - *in relation to a past purchase* - whether it is expensive or inexpensive.

The consumer also assesses non-monetary costs to estimate the quality of product before paying the price asked. It is possible to categorise non-monetary costs in time, search costs, convenience, and brand image; the combination of these non-monetary costs and monetary costs affects the perceived sacrifice made by the consumer.

Studies of price and willingness to pay for food products can be divided into two branches: the econometric tradition and the consumer behavioural tradition.

The econometric tradition - *that represents an objective view on price and price reactions* - considers the price elasticity starting by analysing purchase statistics and measures the willingness to pay using the consumer responses to different price levels

(Lee, Hatcher, 2001). This approach can be used to investigate how consumers respond to changes in market conditions.

The consumer behavioural tradition is a subjective view of price and price perceptions. It is focused on consumer behavioural studies and it aims to find the reasons for consumer reactions to changes in market and price conditions.

The Total Food Quality Model (Grunert, 1997) considers the purchasing intention as effected by price perception and information processing. In fact, even if two consumers perceive the same cost cues in the market place, they may not infer the same cost from the cues; it is due to different factors such as brand loyalty, planning behaviour, and price involvement. Therefore, this model considers two features affecting the price information processing: cue perception process and price integration process. The first concerns price cognition (how the consumer perceives price), the second concerns the willingness to pay (how consumers evaluate perceived price).

Price is one of the attributes in which the systemic view and the self-influence of factors is very evident. Considering the DC-SIP, the sensitivity to price and the reaction of the demand to the price are certainly influenced by the purchase reasons: it can be assumed that if the consumer buys for *want* reasons, they are willing to pay a higher price. If the consumer buys a product not only for its intrinsic characteristics, but - for example - for the perception of the country of origin of the product, for the global values that the brand communicates, or for belonging to a tribe, the weight of the price on the intention purchase is reduced compared to the purchasing process of a consumer who buys the food product for *need* reasons.

#### **4.5.2 Packaging and labelling**

The role of packaging as a communication tool able to influence consumer purchasing behaviour is highlighted in various researches in the food sector (Pomarici, 2003, Bland, 2004). The packaging value perceived by the consumer is also based on a set of intangible elements - brand, information (advice for the preparation and use of the product, ingredients, etc.), service (recyclability or possibility of reuse of the packaging after use, mono-portion packs, etc.) - by which packaging assumes a fundamental role.

In its communicative function, packaging can be analysed from several perspectives. In the sociological field, some authors (Mauss, 1985, Levi-Strauss, 1979, 1992) recognising in the consumption a particular form of language and therefore also different purposes from that of the satisfaction of individual needs - have also interpreted packaging as a communication tool (Douglas and Isherwood, 1984; Di Nallo, 1984; Paltrinieri, 1998; Parmigiani, 1997; Floch, 1992, 1997; Codeluppi, 1992, 2002). Another important contribution comes from semiotics studies, which analyse the signs and related communication processes (Eco, 1975; Ferraresi, 1999; Pastore and Vernuccio, 2003) and whose application to packaging has recently been extended to market research, as in the case of tobacco (Musini, 2005) and wine (Violoni, 2004). In this context, packaging allows a multi-sensorial and bi-directional communication between an issuer and a receiver.

Even marketing studies not only highlight its technical-logistic role (containment, protection, transport, conservation), but also the communicative (Collesei and Ravà,

2004) during different times and places of the purchase and consumption activity. By using colours, images, dimensions, shapes, words, etc., the packaging can communicate to consumers before, during, and after the experience of purchase and consumption, influencing the quality perception of the consumer.

In general, the packaging has evolved from a stage when, while respecting certain aesthetic and functional characteristics, it was a mere container of the product to become a strategic driver of the marketing and sales policies of industrial and commercial enterprises. The packaging is one of the main factors promoting connection between product, brand, and the consumer. The capabilities of the package go beyond those of a simple container to include: effectiveness in communication; efficiency in size; impact resistance; sustainability; recyclability; and flexibility. The challenge for the consumer goods industries is to design effective and attractive packaging, taking into consideration the identity of the modern consumer and the dynamics of purchasing and then integrating the creation of the packaging into the process of product development (Silayoi, Speece, 2004; Kuvykaite, Wells, Farley, Armstrong, 2007; Dovaliene, Navickiene, 2015).

The packaging is strongly related to the product label. The modern consumer needs to access information related to production and/or distribution processes that are often not tangible (organic products, fair trade, product traceability, etc.). This kind of information allows the basket of characteristics that identify the product and the quality of the agri-food goods to be evaluated (Lancaster, 1971; Aprile, Annunziata, 2006). Without other information, during the purchasing decision process, labels become a tool of acquiring information and guiding purchase choices. In fact, there is a relationship between the objective characteristics indicated on the label and the reactions of consumers (Cavicchi, 2008, Bialkova, 2010; Grunert, 2011; Di Pasquale, 2011; Veneziani et al., 2012; Vianelli et al., 2012, Siriex et al., 2013).

Each label is composed of a set of characteristics that convey information about the product. However, the space available to companies is limited by the dimension of the package as well as by the current legislation.

Currently, in the modern globalised market, these kinds of uses can be partially overcome thanks to the possibility of using Mobile Marketing services such as QR codes (Quickly Response). It combines the possibility of providing information with that of promoting and enhancing the product and/or the brand. This system as applied to food labels becomes a tool for knowing all the information about the product and the company that could not be included on a label (e.g. place of origin, history of the producer, production/breeding/cultivation techniques).

In general, the information contained on the label influences the consumer perception of quality by using both the direct information required by law (e.g. place of production, ingredients, information on the production process), and additional information chosen by the manufacturer (e.g. organic, gluten free, fair trade, exclusion or inclusion of particular ingredients). These aspects certainly have a significant impact on the perceived quality level and, therefore, on the purchase decision. Again, the systemic correlation between the various cues that determine the perception of quality emerges. In the case of DC-SIP, the packaging and the label certainly have the role of communicating the intrinsic characteristics and raw materials of the product, the brand and the values it conveys (possibly to generate the effect of belonging to a tribe), the

nation of origin, and the production process. However, it also becomes important for the problem of perfect information: in fact, the packaging and the label can also be used to communicate any differences with the products marketed in other countries to the consumer (how? using specific marks or signals on the packaging?). In any case, it would be important to understand what would change in consumer purchase intentions in the case of perfect information. However, it seems complicated to imagine the effects without specific empirical analyses that directly involve consumers and that also include the contextual elements and the consumer purchase motivations. It can be assumed that if wants motivations linked for example to the halo effect (about COO) or to belonging to a tribe are being referred to, the communication of characteristics that make the product different from the original can modify consumer purchase intentions.

### 4.5.3 Brand

The growing importance and complexity of the concept of brand have been highlighted in recent decades by the large number of definitions proposed and research aimed at identifying the factors and the values of a brand. As defined by the American Marketing Association, the brand is "*[a] name, term, design, symbol, or any other feature that identifies one seller's good or service as distinct from those of other sellers.*" Kotler (2002) provides a definition of brand similar to that just described: "*a name, term, sign, symbol or design, or combination of the same, used to identify the products or services of a seller or group of sellers and distinguish them from those of their competitors,*" and twenty-five years ago Aaker (1991) defined the brand as "*[a] set of assets (or liabilities) linked to a distinctive sign (brand, name, logo) that is added (or subtracted) from the value generated by a product or service.*"

The brand is defined as a multidimensional and complex concept as it integrates the culture, corporate values, and the value proposition that should inspire every expression of the enterprise consistently and continuously (Arnold, 1992).

Brand identity is based on the brand core purpose and its core values, which provide a system of guiding principles (Collins, Porras, 1996). Aaker and Joachimsthaler (2000) identify three dimensions of brand identity:

- *brand essence*, which reflects the promise made to the consumer based on functional benefits, symbolic or emotional, and represents what the brand wants the market to identify;
- *core identity*, the identity composed of all values based on the mission and the strategic orientation;
- *extended identity*, the additional attributes that do not concern the core, but rather specify the meaning.

The relevance of the brand is in its function connecting consumer and enterprise. However, it can highlight features and benefits related to the company and the consumer. Through an appropriate strategy of brand management, the company obtains identification and protection of their products or services through differentiation and consumer recognition. A company uses its brand to capitalise on its investments which accumulate over time into significant asset value.

Considering the models aiming to analyse perceived quality, as previously stated the Total Food Quality Model asserts that before purchasing, consumers base their product expectations on available information. In many situations, consumers could benefit from more information about different quality aspects when they take decisions about purchasing or repurchasing food products. The possible ways consumers may find further information about a food product are the labelling, and generic marks and brand names; in fact, distinguishing between mandatory label, brands, or generic marks allows differentiation between many different labels.

Furthermore, the role of brands and generic marks derives from the degree of perceived risk associated with the purchase. Lastly, the brand or generic mark must be perceived as being reliable. The reliability of a brand is mainly related to its history (if it has been in existence for a long time) and its likelihood of being linked to a high level of quality. All of these elements can be summarised within the concept of brand reputation. In addition, the brand reputation plays an important role in the quality perception process. In fact, several studies demonstrate that international brand image or reputation is certainly related to quality (Bauer et al., 2007). Brand image is defined as the understanding an individual believes to be true about a certain brand (McDaniel et al., 2012). A good reputation is also built up through experience and the history of the brand.

Considering the DC-SIP issue, among all of the numerous and relevant functions that the brand carries out, it is important to highlight the role of the brand as a symbol of belonging to a "tribe". In fact, some consumers choose to purchase a specific product because it is marketed with a brand that allows them to belong to a community. In the literature various definitions are used to describe these groups of consumers, named brand communities, brand sub-cultures of consumption, or brand tribes (Fournier 1998; Cova and Pace 2006; Bazaki and Veloutsou 2010). Although brand tribes are not always so formal, their participants often have a sense of togetherness and belonging (Hamilton and Hower 2010).

In this case, the motivations for the purchase of the product by the consumer exceed the simple *need* to be satisfied and move towards the top of Maslow's hierarchy of needs, towards *want* reasons. It can be assumed that changing the characteristics of the product and the level of information of the consumer has an effect on the trust in the brand that is considered to be a global brand. Therefore, this could reduce the intention to purchase the product which no longer represents a product equal to all the others in the world and cancel the effect of belonging to a tribe.

#### **4.5.4 Origin**

Through the years the international economic and marketing literature has deepened the issue of the country of origin of the product as a variable influencing the decision-making processes of consumers during the purchase phase (country of origin effect) (Usunier, 2006; Rosenbloom and Haefner, 2009).

The first studies are characterised by a single-cue approach: they study the effects of the country of origin (COO) of the product on consumer choices without considering other variables of consumer behaviour.



Studies then moved on to a multi-cue approachable to assess the impact of the country of origin in relative terms. The variable country of origin encompasses a multiplicity of factors that influence the purchasing decisions made by consumers.

With the strengthening of the dynamics of global market in recent years (such as the growing competition from emerging economies and the research of cost savings through the standardisation of production processes), the concept of country of origin is used as a strategic key by the companies to gain competitive advantage.

Nowadays new research trends reformulate the concept of country of origin in more modern terms, that is, as *country image*, *brand origin*, and *place of origin*, offering ideas for further interesting branches of research.

Schooler (1965) is the first author who analysed and attempted to prove the tangible effects of country of origin of products on consumer behaviour.

However, the first studies of COO intensify the effects of these factors, the nation of origin of the product being the only suggestion (cue) on which the respondents based their evaluation. In fact, the more numerous the attributes included in the model, the more moderate the effect of the country of origin of the product is (Johansson et al., 1985; Ettenson et al. 1988).

Thanks to the meta-analysis developed by Peterson and Jolibert (1995) on 52 publications concerning the COO effect, it was possible to quantify the differences between the two different approaches. With regard to the assessment of consumers on the perceived quality of the product, the average effect of the country of origin in single-cue studies affects 30% while in multi-cue studies this effect is reduced to 16%. Furthermore, the result obtained considering the effect of the country of origin on purchase intentions is interesting because even in this case the effect is reduced from 19% to 3% when the origin is evaluated in combination with other attributes.

A more recent study (Usunier, 2002) explains the reasons why the COO effect is less significant than was initially assumed. In order to have some influence on the purchasing process of the consumers, the consumer has to consider relevant information on the origin of the product in relation to his choice (and this varies according to the category of product considered). Furthermore, the importance attributed to the origin of the product must be such as to induce the consumer into investing time in researching and comparing products with different origin. In other cases, when high psychological involvement in the purchase phase is lacking, information on the country of origin is often overshadowed by other characteristics such as price, brand, and warranty.

Even if the COO effect is reduced according to this second branch of studies, that the phenomenon is analysed in more depth. Studies have addressed the many variables related to the product, to the consumer, and the reference economic environment.

Obermiller and Spangenberg (1989) argue that the relationship between COO and behaviour of foreign consumers is due to three main components that interact with each other: the cognitive, the affective, and the normative spheres. In the cognitive component, the country of origin (or its image) acts as an indicator of the quality of the product and of its individual attributes (e.g. reliability, design, etc.). More specifically, information on the country of origin of the product can have two effects (Han, 1989): *the halo construct* and *the summary construct*. The halo effect acts when the consumer

has not gained any direct experience with goods coming from a country, they only have a generic image of that country (for example, information about the economy, social, and political situations, cultural status, etc.) on which they evaluate before purchasing.

The halo-effect corresponds to a process in which additional product information is disregarded or missing and where the impact of the COO on the overall product evaluation is indirect and relatively weak (Hossain, 2015). In this case the country of origin is defined as a halo that people are not familiar with and use it as an indicator for product evaluation. This shows that when people have little knowledge and information about products, they use country of origin as indirect evidence. So, consumers use country of origin as an alternative for the performance of the product while they their experience of products in a same country of origin is unsafe (Rezvani, 2012).

On the other hand, the summary construct is based on previous experiences with products from that country which, through a process of abstraction, allow the consumer to formulate a personal evaluation.

There is an emotional component when the country of origin of the product can evoke an affective value in the consumer (e.g. after a holiday spent in that country) or a symbolic value (e.g. when the image of the country is associated with a certain national identity or social status).

Finally, in the normative component, the purchase is linked to being willing or not willing to support the economy of a given country based on the level of sharing of its policies and conduct.

There are numerous variables that influence the intensity of the effects of COO. Valdani and Bertoli (2010) formulate a classification of different variables referring to various aspect:

- variables that qualify the consumer;
- variables that concern the product and/or the country of origin;
- variables linked to brand.

The aspects most investigated in the literature regarding the first category are the demographic and cultural characteristics of the consumer (age, sex, income, educational level, degree of ethnocentrism, etc.).

Many studies underline the relationship between income and education and the preference for foreign products but this relationship tends to reverse in terms of age. This can be explained by the greater propensity of young or more educated people to interact with different cultures than their own (Shimp and Sharma, 1987; Smith, 1993; Bailey, Pineres, 1997; Ahmed, d'Astorus, 2004).

There does not seem to be any unequivocal opinion on the effect produced by the consumer genre: some studies say that men prefer to buy domestic products (Johansson et al., 1985, Ettenson et al., 1988); other studies do not find any obvious correlation (Anderson, Cunningham, 1972).

Again, other researches deepen the role of patriotism (Han, 1988) and ethnocentricity (Shimp and Sharma, 1987; Brodowsky, 1998; Balabanis, Diamantopoulos, 2004) by consumers who tend to prefer national products over others regardless of other

features. This propensity can induce consumers to overestimate the quality of domestic products and to underestimate the quality of foreign goods (Watson, Wright, 2000).

Therefore, it is important to underline how the level of ethnocentrism of a country, greatly influences the marketing strategies that foreign companies have to adopt if they want to enter this market. If there are high levels of "resistance" to foreign products, companies that want to include the segment of ethnocentric consumers have to reduce the emphasis on the origin of the product and stress other qualitative characteristics in their offer. Other aspects studied in the literature concern the level of involvement and the perceived risk in the purchasing process. Some authors argue that the more the purchase is considered to be important, the less importance seems to be given to the country of origin of the product because more attention is given to all the other attributes of the good (Ahmed, d'Astous, 1993). With regard to the risk perceived in the purchasing process, the consumer perceives a lower risk if they buy goods from their own country (Lumpkin et al., 1985).

Finally, some studies highlight the relevance of the COO effect on consumer behaviour according to the phase of the decision making. In particular, as the qualitative perception of the product moves towards the real purchase intention, the importance of the country of origin tends to decrease. It is possible to explain these differences by considering the complexity of the concepts of perceived quality and purchase intention. In fact, the latter is influenced by a greater number of variables (e.g. price, guarantee, disposable income, availability, etc.) that reduce the effects of the COO (Verlegh and Steenkamp, 1999).

When the socio-demographic characteristics change, the results of the analysis on the intensity of the COO effect can change significantly, there by conditioning a possible generalisation of the totality of consumers in a country (Sharma et al., 1995; Wetzels et al., 1996).

From an economic, political, and cultural point of view, the image of a country is able to influence the purchasing intentions of a foreign consumer regardless of the judgment of the quality of the products (Wang and Lamb, 1983).

Regarding the image of a country, some studies argue that consumers express evaluations and judgments by using a "hierarchy between countries" built in their minds. This scale is constructed by considering the level of economic development of the country (Manrai et al., 1998; Ahmed and d'Astorus, 2004).

Furthermore, the effect is greater when referring to products of country with a particular production tradition (e.g. Italian fashion, French perfumes, Swiss chocolate, etc.) (Baumgartner and Jolibert, 1977; Roth and Romeo, 1992).

The effect of the COO is not equal for all types of products. Therefore, a country can be appreciated for some types of goods and not for others.

Several authors have noted how the effect of the country of origin increases as the technological complexity of the product increases (Kaynak and Cavusgil, 1983; Hadjimarcou and Hu, 1999; Ahmed et al., 2004).

However, companies can take advantage of the effects of the COO if they are combined with promotional and communication policies in order to enhance their image (Bradley, 2001).

Another theme concerns the relationship between country of origin and product life cycle. In marketing campaigns, the reference to the origin of the product produced by company is emphasised more often in the early stages of the life cycle, especially in the "go to market" phase while it tends to lose importance in the phases of growth and maturity (Niss, 1996).

The main reason to aim for a COO strategy compared to a brand-focused strategy in the "go to market" phase is due to focusing on the country of origin being more immediate and results in a quicker return on sales. Over time, once the product has become well known in the target market, the company will progressively move towards marketing using a brand strategy.

Another aspect that is discussed in the COO studies is the relationship between product brand and country of origin. The importance assumed by the brand in the consumer perception process induces scholars to investigate this issue from various perspectives. Han and Terpstra (1988), Wall et al. (1991), and Tse and Gorn (1993) argue that the country of origin has a greater impact than the brand in the purchasing process. However, other scholars (Ahmed et al., 1994; Verlegh et al., 1999) consider the effect of the brand to be more relevant than the COO effect.

This discussion on the role of the country of origin involves all of the other factors (brand, price, packaging, labelling), again demonstrating a close correlation between them. The research presented clearly shows that COO has an effect on the purchase intentions of the consumer; the effect may derive from real and direct knowledge of the country consumers have or from the halo effect that the country generates. Therefore, consistently with the other factors, it can be assumed that if in the case of DC-SIP, the product recipe, the raw materials, or even the entire country of production is modified and communicated to the consumer, the COO or halo effects change. On the other hand, if the consumer is not informed of the differences, he or she starts from a presumption of equality of the product linked to trust in the brand and to the values the country of origin evokes.

#### **4.5.5 Healthy and organic**

The perception of health is very extensive and can be approached from different scientific perspectives including psychological, social, nutritional, and medical ones. From a consumer point of view, health includes two main dimensions: eating healthily and staying away from unhealthy foods. The first dimension, eating healthily, is related to nutritional aspects such as a healthy diet, functional foods, less oily foods, and other factors related to health and nutrition. The second dimension, avoiding unhealthy foods concerns food security.

Both health dimensions express qualities of the food that consumers cannot evaluate or judge by themselves.

It is useful to present examples from several studies that explain the role of the perception of food health in the consumer perception of quality. A study of consumer perceptions of fish and motives for purchasing (Nielsen, Sørensen & Grunert, 1997; Valette-Florence, Sirieix, Grunert & Nielsen, 2000) highlights how *healthiness and physical well-being* is one of the most significant reasons why these consumers buy

fresh fish. According to these consumers, the fact that fresh fish is an *untreated product* (a natural product), contains *vitamins and minerals*, and is *low in fat* are all attributes which contribute to *healthiness and physical well-being*. In a study of apples (Bech-Larsen, 2001), respondents were asked to mention differences between apples and alternative foods. The results of the study demonstrate that *organic/not sprayed* and *vitamins* all contribute to the feeling of being *healthy* and *not ill*, leading to a *long, healthy life, a good feeling, and a high life quality*. The examples presented also underline the fact that health due to food is subjective.

As with the quality dimensions (health) presented above, organic cues of product also represent another factor that refers to perceived quality. Food safety, human health, and environmental concerns along with physical attributes such as nutritive value, taste, freshness, and appearance affect organic food consumer preferences. (Shafie & Rennie 2012). Consumers also associate organic food with ordinary processes, care about the environment and animal welfare, and the non-use of pesticides and fertilisers. Increasing attention to organic food has encouraged many studies to compare aspects of organic against conventional food in terms of human health, food safety, and environmental concerns along with other sensory attributes such as nutritive value, taste, freshness and appearance. (Barrett et al. 2007). Although physical estimations on whether organic food tastes better than conventional food have yielded inconsistent results (McEahern and McClean, 2002), many consumers believe that organic food tastes better (Roitner-Schobesberger et al, 2008). Therefore, consumer perceptions about organic food are highly subjective.

This factor is also important for DC-SIP because the variation of the ingredient or recipe by the company (and any communication to the consumer) can generate a variation in the perception of quality, health and safety, impacting on the purchasing intentions of the consumer.

#### **4.5.6 Intrinsic factors**

The selection of this factor aims to include the main intrinsic elements of the perceived quality of the food. In fact, most of the studies analysed considers specific organoleptic properties/ingredients depending on the category of product being analysed.

For example, in analysing the perceived quality of beef, Brunsø et al. (2002) found the following to be Intrinsic quality cues: cut (steak, roast, cubed, minced), colour (light red, medium red, dark red for roast and steak, lighter red and darker red for cubed and minced), fat lumps (major, minor), fat rim (yes, no), marbling (high, low), and fat content (high, low).

Therefore, these aspects are complex and cannot be generalised because they are closely related to the type of product that the consumer intends to purchase.

In any case, it is important to introduce a factor that summarises the intrinsic quality cues to highlight that the visual, olfactory, and tactile elements of the product in each specific case play an important role in the formation of quality perception and therefore in the possible evaluation of the DC-SIP.

## 4.6 Conclusions

As seen, discussion of the DC-SIP considers the literature and research on product standardisation and differentiation and on the cues/attributes that determine the concept of quality perceived by consumers.

In the hypothesis of different products in different countries, it is also necessary to reflect on the motivations that could cause a company to communicate or not communicate these differences.

Certainly, the first problem would be linked to "how" to communicate differences to consumers on product packaging or through institutional advertising. In any case it would be necessary to hypothesise a tool that can be applied easily.

In addition to the tool, the motivations that could exclude the will by companies to communicate differences between products and the effects of communication on cues and on perceived quality must also be evaluated.

The previous discussion on quality cues for purchasing decisions shows that providing consumers with information about the product not only affects the perception of intrinsic factors, but can also impact on all the credence cues and ultimately on the perceived quality.

In this process, the brand and the consumer purchase motivations play a primary role. For example, consider the case of a brand recognised by the consumer as a global brand, to which he associates values of belonging to a tribe that go beyond the spatial boundaries between territories. In this situation the company will have no interest in communicating that the ingredients or the recipe of the product are different in the different markets since what could be a simple variation linked to the strategies of differentiation of the company can also have a negative impact on the value of the brand and be interpreted as a betrayal by the company that proposes a global brand but not a global product.

Similar considerations can be made with reference to the attribute of origin. The COO of a product itself conveys values linked to the cultural aspects of the nation. Among these are certainly the recipes and methods of production of the products. Therefore, the communication of a variation of these can annul the halo effect of the country of origin and reduce trust in the brand and in the "made in" that it communicates.

Still, in the same way communicating differences to the consumer can impact on the perception of health of the product. In this case, the reduction or increase in the quantity of an ingredient or the change in one of the raw materials could be interpreted by the consumer as a variation that increases the danger or in any case reduces the wholesomeness of the agrifood product.

Therefore, in general, if it refers to wants-like purchase motivations in which the extrinsic attributes have a revealing role, the company could be unwilling to communicate to the consumer the variation of ingredients and recipe (intrinsic attributes). In fact, this can negatively impact on the perception of price, of health, of origin, of the values of the brand, and so on the perception of quality and therefore on the purchase intentions of the consumer. In fact, the attributes that determine the

perceived quality move in a systemic way and influence themselves: the variation of one can generate effects on all of the others.

## 4.7 References

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