

Psychological factors of diet and health: a modernist and postmodernist perspective

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Abstract

This review aims at providing a comprehensive perspective of the area of consumer psychological aspects concerning diet, healthy eating habits and health behaviour in the era of modernism and postmodernism.

Keywords: Eating behaviour, Health behaviour, Consumers' psychological factor, Modernism, Postmodernism

Review Methodology: More than 140 articles published in international journals, text books and research reports were reviewed for this article. Other publications that focused on consumption patterns and issues related to consumers' psychological set towards consumption of functional foods, organic foods and genetically modified foods were gathered from international symposium publications. Relevant full text articles were accessed through the EBSCO database, JSTOR and Science Direct.

Introduction

Consumer behaviour theories acknowledge – not only at the level of education and research, but also in marketing – that primary psychological factors play a significant role in the buying decision process. These primary psychological factors include perception, attitude (affective, beliefs and behaviour), personality, knowledge and intentional motivation. The ability to predict these psychological factors provides a better understanding of the future consumers' decision-making process and their reactions to different marketing campaigns. Companies usually integrate research on the consumers' psychological aspects into their marketing intelligence systems. This knowledge of consumers' fundamental underlying psychological patterns gives companies clues about how to set up future behaviourally determined marketing activities, such as promotion, price, placement and product strategies. For example, if a company understands how consumers perceive and what they know about certain issues, this can be beneficially used to determine how much information should be given to the market place of a newly-launched product. Information on consumers' attitudes are predominately used to formulate new advertising messages, and the information can also be useful for detecting the consumers' level of awareness and

interest towards, as well as adoption of, certain advertising messages. In addition to giving information about consumer attitudes, knowledge of motivation factors can benefit the marketer by providing a better predictable future or expected sales volume of a given product and, possibly, its accepted price. Moreover, it is generally accepted that specific psychological characteristics determine the decision-making process that then defines the market segment for a new product [1–4].

The psychological set also plays a significant role in marketing foods and beverages. Since the early 1980s, studies have shown that consumers' psychological set determines or positively correlates with the future buying intention of food and beverage products. This has been demonstrated in some recent publications. Having information on personal attitudes, like affection, beliefs and the cultural context from which this information is derived, can help understand the relative importance of factors that influence food choices [5, 6]. Attitudes and beliefs have been proven to influence food choices along with many other factors, including demographic, environmental and socio-economic factors [7, 8]. Attitudes towards the object would seem to be particularly relevant in the area of eating behaviour. Different foods are embedded with different meanings and can generate both positive and

negative responses [9]. One way of exploring the factors that guide food selection is examining food attitudes. Research investigating the utility of food attitudes for predicting food-related behaviour (e.g. diet, consumption and purchases) has focused on the Ajzen and Fishbein's theory of reasoned action [10, 11] and Ajzen's [11] theory of planned behaviour, which suggest that attitudes affect behavioural intentions, which in turn influence behaviour.

However, in a newly well-established or saturated market with abundant product offers, such as in the food and beverage sector, the consumer decision process is vague and often unpredictable. The abundance of relatively similar products, strong market competition and absence of significant growth in consumption are some characteristics associated with a saturated market when consumers are satisfied with abundant product offers, which have relatively similar features, characteristics and benefits. Moreover, the market place is becoming increasingly knowledgeable, demanding and sophisticated. In the food and beverage market, consumers have become more aware of the food they are eating [12, 13]. Certain dieting styles, like vegetarianism, veganism, and eating low-calorie, organic and functional foods, have become more common. Recent studies have shown that the number of vegetarians has grown in several countries over the past few years [12–15]. The problematic issues of such market place have been occasionally discussed to reveal and preconceive how consumers' psychological factors influence or determine their future decision-making processes.

Many well-prepared marketing campaigns have failed even though established market research was conducted prior to the launching of the new product. The new wave of marketing theory has argued that traditional research methods, such as personal face-to-face interviews with questionnaires focusing on certain groups, is no longer serving the task of finding out what consumers really think and demand. The consumers' irrational minds, flooded with cultural biases rooted in tradition, upbringing and a whole lot of other subconscious factors, assert a powerful but hidden influence over the choices that are made [16].

Consumers have become increasingly individualized and personalized, and their perspectives and needs are steadily changing. This makes it almost impossible to capture and generalize their characteristics, which is something that quantitative market research methods usually aim to do. If study results fail to characterize individual differences, preferences, notions and sensations, it is typical that the study methods and scales used, e.g. Linkert's scales or semantic differential score, are found to be inadequate. However, often consumers' captured psychological factors cannot or can only weakly explain a person's future buying behaviour. Some researchers now suggest that the poor relationship between knowledge and behaviour can be explained by measuring knowledge inaccurately [17–19].

Inherent knowledge is probably a necessary but not a sufficient condition for expressing healthy dietary behaviour [20]; in most studies, knowledge about nutrition is only

weakly associated with such behaviour [21–24]. Gabriel *et al.* [25] found that implicit measures of attitudes failed to predict helping behaviour after controlling for explicit measures of cognitive and affective attitudes. Furthermore, no significant correlation was found between Body Mass Index and total nutrition score [26]. According to Pierce *et al.* [27], many people know about healthy dietary behaviours but are unable or unwilling to adopt them. Other studies have found a weak correlation between knowledge on nutrition and actual choices made about healthy food [28, 29]. Similarly to knowledge factors, attitudes cannot be directly observed, and hence their existence and strength must be inferred from what is observable. When attitudes towards diet and lifestyle behaviours are measured retrospectively, it is difficult to resolve the issue of temporal patterning of attitudes and behaviour; in other words, whether attitudes cause the behaviour or the behaviour produces the attitudes [30]. The results of a meta-analytic study suggested that this kind of behavioural intervention approach was especially effective for one-off or infrequently performed behaviours, such as obtaining a mammography, but for behaviours performed frequently in a stable context the success of information-based interventions was more limited [31]. These above-mentioned examples explain the scepticism that exists around the relationship between psychological factors and behaviour.

This paper aims to review the historical development of theories focused on the different factors influencing consumers' psychological set and how the psychological factors impact the marketing of food and beverage products. The below sections present two theoretical paradigms, i.e. the traditional perspective of positivism, also called modernism, compared with the more recent non-positivist theory, also called postmodernism. This review focuses on the development of psychological characteristics of consumers. Furthermore, psychological sets concerning consuming and buying food and beverage products, as well as the diet issues of each paradigm, are presented.

Traditional Perspective (Positivism Theory)

The propositions of the positivism perspective are the most commonly learnt theories in the social faculties around the world. The practical consequences of this perspective are also well applied in the industry, especially when dealing with consumer behaviour and marketing implications. This well-accepted theory covers at least six fundamental concerns related to the psychological views of a consumer.

1. Consumers are 'economic creatures'. They are largely 'rational' and conscious of economic orientation. Thus, the individual buyer seeks to spend their income on a minimal scale for those goods that will deliver the most utility (satisfaction) according to their expectations on

quality, variability and taste, based on their buying capability (price). The antecedents of these views can be traced back to Adam Smith (1776) [32]. As a rational endeavour, consumers behave towards a personal goal or need fulfilment. Every individual has needs, wants and desires. For any given need, the individual forms a goal depending on their personal experiences, physical capacity, prevailing cultural norms and values. Individuals are usually somewhat more aware of their behavioural actions and strive toward the achievement of existing goals. Needs and goals change and develop in response to the individual's condition, environment and social engagement.

2. Consumers are regarded as relatively passive entities who can be taught certain behaviours through repetition (i.e., conditioning). They behave as toward a conditioned response to an external stimulus. Therefore, the behavioural perspective focuses on external cues that stimulate the consumer response throughout a long-standing learning process (classical conditioning theory) [1–4]. The stimulus that results in the most satisfactory response is the one that is learnt (instrumental conditioning). Stimuli are inputs and they are stored through different ways and processes. The meaning of a stimulus is differently associated by individuals and this interpretation makes up the process of perception. Activation of the brain's learning process involves complex mental processing of information and stimuli. This process involves sensory store, selection and processing, and long-term store. It uses information from the market place in order to achieve maximal satisfaction in the buying process of goods (cognitive learning theory). People tend to organize their capacities to move toward and engage some objects, and to avoid or withdraw from others.
3. Consumers tend to learn, store and retain information found in the market place. This information is sometimes retrieved from the memory and likely used for a careful evaluation of the merits and weaknesses of a product, especially when the purchase is of high relevance for the customer.
4. Consumers form an attitude that is lasting over time. The individual attitude is predisposed toward performing certain types of behaviours, all of which are either favourable or unfavourable with respect to the object. A fundamental assumption underlying the attitude concept is the notion that in some way attitudes guide, influence, direct, shape and predict actual behaviour [33].
5. Perspective of trait approaches some dispositions as major forces behind personality, including hostility, introversion, tolerance, psychopathic deviance, repression and impulsiveness, which to some degree influence a person's buying or consuming behaviour and brand selection [34].
6. Motivation is awakened by self-interest or inherent persuasion (the self-concept theory) and by external factors. People give a direction to their action based on

self-interest and create self-incentives (self-satisfaction) to persist in their efforts until their performances match with their goals (the Goal Theory of Bandura) [35]. Extrinsic cues can be to gain personal rewards (such as maximizing positive actions of results or gains in the ideal goals concept), to achieve personal hope, aspiration and wishes [36, 37], to obtain benefits of action (such as health, body pleasure or good appearance), or to receive positive valuation of action (such as described in the Health Belief Model) [36–39].

Positivism encompasses the rational and cognitive behavioural learning processes, and intentional, attitudinal and stable personality traits. Until now, the positivism theories have been abundantly applied and studied in many behavioural aspects including diet, marketing of food and beverage products, and healthy eating behaviour. With regards to the issues of food and beverage consumption, a focus has been on studying consumers' consumption of some specific food groups, such as functional foods, organic and genetically modified (GM) foods. Many studies have shown that different levels of acceptance may be due to the fact that prospective consumers differ in their psychological set, for example, in their awareness of motives and evaluation of food consumption [40–43], acceptance of functional food [44–47], knowledge about nutrition [48, 49], attitudes towards functional food [40, 44, 46, 50, 51], and willingness to buy or intention to consume functional food [50, 52].

Several psychological factors associated with consuming functional food have been extensively studied. Firstly, motives as a basic operant of behaviour underlying consumer's decision to consume a functional food product have been studied with the aim to understand consumers' reasons and readiness to buy functional foods. It has been argued that motives behind the attitude towards consuming functional food include, e.g. healthiness, taste, pleasure, security and familiarity [53]. Other studies [54–56] have shown that direct hedonic perception, i.e. the tasting and liking of a food, strongly guided the food choices. However, consumers do not only choose the most liked options but instead, they compromise on several preferred alternatives between liking, price and other choice factors [57]. In one study, Danish consumers in particular were suspicious about functional food, judging it as 'unnatural and impure' [58]. Consumers in Finland thought that the buyers of functional food conveyed the impression of being more innovative, but that they were not as nice as the consumers of conventional healthy food [59]. These motives differed between different product categories. According to Frewer *et al.* [60] a functional food with desirable and proven health benefits may not be attractive to consumers if its sensory properties do not meet consumer expectations or if it is simply too expensive to warrant purchase.

Other aspects of functional foods that have been well studied include perception, knowledge, attitude and belief

directing the consumers' acceptance to consume functional foods. Consumers' perceptions of the healthiness of the products, as well as the processes and enrichments involved in the production of functional foods, are crucial in determining consumers' acceptance of these foods [44, 45]. Moreover, perceptions and attitude, which are strongly founded in cultural values, are difficult to change by informative means such as a health claim [60]. In other words, the effectiveness of health claims depends on, for example, the strength of the association between consumers' values and their attitudes towards functional foods. Furthermore, in order to consume a functional food, people need to know the 'what' and 'why' of consuming them – what benefits they will get from consuming a particular food, and why the food provides those benefits [48]. In a study on functional food soy products, Wansick *et al.* [48] showed that different types of knowledge about a food item lead to different levels of consumption likelihood. Another study showed that there is a significant relationship between nutritional knowledge and healthiness perception and willingness to try functional foods [49]. Consumers with low level of nutritional knowledge were not interested in the consumption of functional foods, whereas consumers with the highest nutritional knowledge were interested in the enrichment of healthy products with fibre or antioxidants.

Several studies with the main focus on consumer psychological set have also been conducted to understand consumer attitudes, perceptions and acceptance toward GM crops and GM products [61–66]. The results have revealed that consumers' perceptions toward the potential benefits and risks of GM crops are still mixed and differ within and across countries. Moreover, consumer attitudes toward GM crops change as consumers are exposed to new information [67]. The availability of information has a crucial impact on consumers' preferences for GM food products. The effect of genetic modification differs between product categories because it affects the evaluation of products [68]. Some studies have found that consumer perceptions of the risks and benefits of GM products can be predicted reasonably well by their general attitudes towards technological progress [69, 70], environment and nature [69–73], and trust in the institutions that regulate emerging technologies and manage their risks [73, 74].

Numerous studies have assessed and compared different consumer preferences, values and attitudes towards organic products [75–77]. Roninen *et al.* [78] and Seyfang [66] studied consumer values in the context of local and organic food product attribute. In the UK, Kuznesof *et al.* [79] found mainly generational differences in the perception and consumption of local and regional products, which can potentially be perceived as traditional, old-fashioned, native and home-cooked. Organic foods are often perceived as products with added-value, particularly among Danish consumers [80, 81]. Evidence suggests that consumer choices of organic food seem to be based on similar justification and reasons, whereas individual attitudes

towards organic food are primarily based on beliefs about benefits [76]. Consumers' attitudes are derived from beliefs about positive health effects, environmentally friendly production and better taste of organic food, as has been revealed by many studies conducted in different parts of the world [82].

Numerous studies on healthy eating behaviour have revealed that consumers' awareness of health and food and beverage consumption behaviour is like two sides of a coin – concern about health and disease prevention influences diet patterns. Change in dietary behaviour might occur through changing food-related attitudes [83]. Researchers have argued that attitude represents a summary evaluation (positive or negative) of a psychological object and that attitude guides behaviour toward the object [84, 85]. Attitudes have been shown to predict behaviour and behavioural intentions in a variety of ways including health-related behaviours and food choices [86–90]. Attitudes and values towards consuming a product have been found to predict and explain consumers' choices across services and products, including food products (for a general overview, see [91]). Additionally, consumers are increasingly segmented on the basis of their attitudes towards food [92], and identifying those segments with different attitudes might allow targeting different types of products for each segment. There are several variables that can explain these differences that affect food choice, among them is food involvement. Hence, nutrition knowledge somehow influences people's dietary habits independently from other socio-economic factors. These data support the idea of improving people's knowledge on health-related issues as a possible tool for promoting healthier choices, also in terms of dietary habits, independent of other less-modifiable risk factors such as socio-economic position [93].

Food choice has increasingly become a form of expression of consumers' self-image and personality. Goldsmith *et al.* [94] stated that selecting some food types reflects beliefs about valued ways of being or living and behaviours. 'Life-guiding principles' interact with food choice motives (such as health, shopping or eating convenience, religious reasons, or ecological welfare) and create food ideologies that reflect the consumers' ideals and ways of living, and also shape their food-related lifestyle [95–97]. 'Self-image' (SI) is an important motive for the onset and maintenance of substance abuse and other health behaviours among adolescents [98–100]. Similarly, 'self-presentation' has been shown to have an association with a number of health behaviours [101, 102] suggesting that concerns over one's public image is an important factor in explaining certain health habits. According to the 'self-presentation theory' (impression management) people often control and process their behaviour in accordance with the impression of others on them [102–104]. The impression and acceptance of others is considered as incentives for people to react and achieve a given goal. Self-presentation is motivated by more than pure social

approval-seeking. Subjective norm refers to the strength of people's belief that referent individuals or groups will approve or disapprove her/his action or performance (or normative beliefs) [105].

According to positivism, social issues are often strongly linked to psychological impetus. Besides psychological and economical concerns, social issues can be considered important impetus for developing motivation to pursue diet-based prevention. A well-known phenomenon is social modelling where people tend to adapt and adjust their eating behaviour towards the amount modelled by their eating companion [106]. Such modelling effects have also been found when participants were merely exposed to a fictitious list showing how much 'other participants' ate [107, 108]. A recent study showed that people do not only conform to the food intake of others, but also to the food choices of other people who are not physically present. Such environmental cues may influence behaviour because they act as a social proof heuristic, meaning that people look at what others do for behavioural guidance when they are unsure in unfamiliar or ambiguous situations [109]. Finally, it can be stipulated that consumption can be conceptualized from cultural, social and psychological perspectives as being a prime site for the negotiation of conflicting themes of freedom and control through the consumption of symbolic meaning within a consumer culture [110].

Postmodern Perspectives

Postmodernism has started to spread among academics as another philosophical and scientific concept. As has been discussed above, positivism underscores the consumer buying decision process as a rational, cognitive, attitudinal and motivational process. This traditional perspective put the subject (consumers) at the centre and elaborated the project of modernity in terms of the relationship this subject develops with the objects he or she acts upon in order to improve conditions of life. These mutual subject-object relations constitute the economy. The rationality of managing these relations is the substance of economics.

Compared with modernism, postmodernism recognizes somewhat ten different conditions [111]:

1. Acceptance of difference (differences of way, mind, style, ways of living) without prejudice and without evaluation of superiority and inferiority.
2. Hyper-reality: deals with the tendency and willingness on the part of the consumers to prefer the hype or simulation to the 'real' itself. Hyper-reality is the becoming real of what initially was or is a simulation or 'hype.' Through forms of communication, they can be detached from their original referents. Thereby their original meanings (the signified: verbal, visual, or material signs or symbols that represent things making

them intelligible), become 'free-floating'. They can, then, be attached to new meanings [111]. Consumption is particularly characteristic as a meaning that it is more fluid, symbol-oriented and consumer-controlled than the previous conceptions of it allowed [112].

3. Fragmentation: omnipresence of disjointed and disconnected moments and experiences in life and sense of self – and the growing acceptance of the dynamism, which leads to fragmentation in markets. Fragmentation implies that in each instance of consumption – for example, as the consumer eats a frozen dinner, watches television, brushes one's teeth, or feeds the cat – the consumer engages in a series of independent, separate, unconnected acts without a common purpose. Each act requires a different product, each fulfils a need that is fragmented and detached from the others. Each moment of consumption may well be cultivated to represent a different image of oneself, as if that was the guiding principle of life.
4. Reversal of consumption and production: a cultural acknowledgement that value is created not in production (as posited by modern thought) but in consumption – and the subsequent growth of attention and importance given to consumption.
5. Decentring of the subject: removal of the human being from the central importance she or he held in modern culture – and the increasing acceptance of the potentials of his/her objectification. Thus, the postmodern perspective places great emphasis on the creativity, autonomy and power of consumers to define and change themselves and the world in which they live through different patterns of consumption and lifestyles [113].
6. Paradoxical juxtapositions (of opposites), or anti-foundationalism.
7. Perpetual present: cultural propensity to experience everything (including the past and future) in the present, 'here and now'.
8. Loss of commitment: growing cultural unwillingness to commit to any single idea, project or grand design.
9. Emphasis on form/style: growing influence of form and style (as opposed to content) in determining meaning in life.
10. Acceptance of chaos: cultural acknowledgement that rather than order, crises and disequilibria are the common states of existence – and the subsequent acceptance and appreciation of this condition [112, 114–119].

Table 1 summarizes some of the different arguments of the two perspectives in relation to consumers' psychological factors.

In postmodernism, marketing should put its efforts into communicating the possibilities of how products could or will fit into consumers' aspired lives, experiences

Table 1. Some of the different arguments of modernism and postmodernism in relation to consumers' psychological factors

Modernism	Postmodernism
Overemphasizes the rational view and the ideology of a homogenous social culture and thereby denied the complex social and cultural world in which consumers live [120]	Refuses to privilege any one perspective, and recognizes only difference, never inequality, only fragments, never conflict [120]
Like or dislike or attitude toward object is built as a long process of learning from new experience and given stimulus or information	The importance of symbolic and subjective experience and the idea that consumers construct meanings based on unique and shared cultural experiences and thus, there can be no single unified worldview
Represents a limiting view of the individual (or the consumer) as merely a cognitive agent [112]. People tend to adapt, learn and adjust their eating behaviour towards the amount modelled by their eating companion [106]	Fragmentation; a single consumption gives a different meaning, feeling or value. Each moment of consumption may well be cultivated to represent a different image of oneself, as if that was the guiding principle of life [112]
Renders the consumer a reluctant participant in a rational economic system that affords no emotional, symbolic, or spiritual relief to the consumer [121]	Consumption is not just a personal act of destruction by the consumer, but very much a social act where symbolic meanings, social codes and relationships, effect the consumer's identity and self, are produced and reproduced [122, 123]
Perception and experiences are judged based on satisfaction level with the product's quality and its given benefit or value orientation. Perception, attitude and positive personal experience lead to product loyalty. Consumers are regarded as relatively passive entities that can be taught certain behaviours through repetition (i.e. conditioning). They behave as toward a conditioned response to an external stimulus	Consumer does not judge the experience from a privileged or foundational perspective but largely from one of whether it represents an exciting, interesting experience that contributes meaning and zest to life. No emotional or cognitive commitment beyond a single purchase for trial consumption is required in the market. Anything can be tried and dropped as long as the buying power is existent
Belief forms attitude and attitude determines future behaviour [1–4]. A fundamental assumption underlying the attitude concept is the notion that attitudes in some way guide, influence, direct, shape and predict actual behaviour [33]	There are no fixed or pre-given essences residing inside consumers that make them behave the way they do [113, 114]. A significant characteristic of the postmodern individual is that he/she avoids commitment [124]
Personality in general is understood as a concept which accounts for the apparent consistencies and regularities of behaviour over time and across a variety of situations [125]. According to the social cognitive learning theories, personality traits produce consistent behaviour over time and across situations [34]	Consumers frequently change their self-concepts, character, values and often subscribe to multiple and often highly contradictory value systems, lifestyles, etc., without feeling inconsistent or improper [112]. Consumers fit in with their loss of a commitment to any single lifestyle or belief system and this results in ' <i>bricolage</i> ' markets, that is, consumers who do not present a united, centred self and, therefore, set of preferences, but instead a jigsaw collage of multiple representations of selves and preferences even when approaching the same product category [126]
Consumer's decision-making process is much more influenced by product's utility and its value in fulfilling the need and want. Human is as an existential subject that follows and values the cognitive decision-making process	Consumer does not make consumption choices solely based on products' utilities but also based on their symbolic meanings [126–131]
Consumers observe reality	Life is increasingly involved with hyper-reality [132]
Modern consumer may have been expected to be loyal to a company or a product [133–135]	Postmodern consumer exercises freedom to move where choice or <i>whom</i> indicates [133–135]
Human being is at the centre as the subject, that is, as the agent that acts through and upon others, nature and objects. This subject is endowed with the ability to act independently and autonomously in the choice and pursuit of one's goals, to act self-consciously, and is committed to a reasoned and reasonable goal or end	Self is essentially decentred, preferring the ability to switch images and utilize consumption as a means of constructing powerful images liberating them from monotony and conformity [134, 135]

and self-images. Marketing has historically been a primary institution of simulation, imaginary and hype. Marketing communications are changing shape, metamorphosing into new configurations and forms as a result of underlying technological changes and in the face of ongoing recessionary influences. For the first time in history, people are exerting more influence and control over marketing

processes [136]. The consumer engages in a series of independent, separate, unconnected acts without a common purpose. Each act requires a different product, each fulfils a need that is fragmented and detached from the other. Each moment of consumption may well be cultivated to represent a different image of oneself, as if that was the guiding principle of life [137]. Studies by

Dholakia *et al.* and Cova and Pace [138, 139] reveal that postmodern consumers show other forms of sociality and empowerment, based not upon interaction between peers, but more on personal self-exhibition in front of other consumers through the marks and rituals linked to brands.

There is a limited number of studies on diet and health behaviour that have been focused solely on the perspectives of postmodernism. Only a few studies have shown results reflecting postmodernism. Brunsø *et al.* [96] found that internalised food-specific values (called food-related lifestyles) intervene between the more abstract personal values and situation-specific product perception and food behaviours. Values that are central to self-concept might manifest themselves as general habits, which express an overall motivation that is enacted in a variety of situations [140].

Some studies have shown that brands are considered to be decision heuristics. They can be used as markers of functional performance to inform rational consumer choice, or, as in modern consumer societies where sign value is prioritized over use value [141], individuals can use brands as resources to construct and communicate their identities [129, 130, 142–144]. In this way brands can facilitate non-rational consumption choices or choices where the functional utility of branded goods is not considered. Brand consciousness matures, becomes more complex and has a greater impact on consumers' lives as the significance of the brand moves from a functional marker of quality and performance to become an important symbolic, emotional and cultural resource [145–147].

However, an empirical study by Thompson and Hirschman [148] on this emic-etic split suggested a contradictory view. They reported that, contrary to the 'unencumbered self' romanticised in treatises on postmodern consumption, many traditional cultural perspectives were woven into consumers' self-conceptions and exerted an enduring influence on their everyday consumption activities [148]. In fact, their findings were directly contradictory to the ones of Firat *et al.* [119, 149].

Conclusions

Since the early 1980s, the consumer behaviour theory has stated that consumers' psychological set determines or positively correlates with future buying intention of food and beverage products. Predicting consumers' psychological factors will provide a better insight into understanding the future consumers' decisions and reactions to a certain market stimulus. It is well accepted that the consumer buying behaviour perceived as a rational, goal-oriented and passive entity reacts consequently to a given stimulus. A future behaviour is predictable through a series of initiated learning processes and attitudinal as well as motivational goal orientation.

However, in the saturated market, such as the market of food and beverages, where consumers are already satisfied with abundant product offers, which have relatively similar features, characteristics and benefits, and where consumers are well knowledgeable, their future decision-making processes and consumption patterns are apparently quite chaotic and more unpredictable. The marketplace is becoming knowledgeable, demanding and sophisticated. Due to this changing market culture, regular and traditional market research and behavioural research on revealing individual psychological factors have often failed to serve as barometers for setting up an appropriate marketing strategy. Therefore, the current research paradigm tries to find out key aspects that can explain why the well-established and accepted positivism/modernism paradigm of buying behaviour (that encompasses the rational, cognitive behavioural, learning process, intentional trait, attitudinal and stable personality traits) nowadays seems to be less accurate and problematic in predicting future buying behaviour. Behavioural economics predicts future buying decisions, is more than a causal reaction relationship, and is versatile.

The postmodern theory proposes a new paradigm that may suggest other clues explaining the different perspectives of consumer movement. Postmodernism recognizes that consumers are hyper-real, free of commitment, dynamic, perpetual and that they cannot be clustered or segmented. Postmodern consumers adore freedom and tend to perform a different imaginary in the moment of consumption of a similar product. Distinct from the learning process proposed by positivism, in postmodernism, consumers experience a different moment and have no clear pattern. A single consumption gives a different meaning, feeling or value. Each moment of consumption may well be cultivated to represent a different image of oneself, as if that was the guiding principle of life [112]. Unfortunately, this perspective is not sufficiently studied. Some empirical evidence is necessary to provide proof of the correlation between postmodern theory and occurred behaviour. At the moment, research on food consumption and healthy diet habits in the postmodern era is still limited. In the future, research on themes attempting to empirically prove the perspectives of postmodernism in relation to food marketing and consumption behaviour may be required to reveal differences in every single experience to commit to and pursue a healthy diet.

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