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# Applications of Psychology in the Analysis of Consumer Behaviour – Selected Issues

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**Abstract:** Psychology plays an especially significant role in the study of consumer behaviour, as it applies scientific research of human, social, cognitive and emotional factors in order to better understand the behaviour of individuals. The paper presents aspects of the use of psychology in contemporary studies of consumer behaviour. The aim was to indicate the current aspects of the use of psychology in consumer behaviour research and to indicate further directions of using psychology in relation to contemporary changes on the market. The paper features theoretical deliberations based on the literature of the subject.

**Keywords:** consumer behaviour, consumption, psychology

### 1. Introduction

The interest in consumer behaviour stems from the fact that along with economic growth as well as political and social changes in the world, an increase in the standard of living, production growth achieved thanks to technological advances, the appearance of new goods and services on the market as a result of civilisation and cultural transformations, the patterns of consumer behaviour and the decisions taken by them have been evolving. Contemporary research on consumer behaviour proves the complexity of this phenomenon and is the subject of research in many scientific disciplines, including economics, sociology, psychology and medicine.

Particular importance in the study of consumer behaviour is played by behavioural economics as a science that combines economic and psychological aspects. Behavioural economics uses scientific research on human, social, cognitive and emotional factors to better understand people's economic decisions. As part of the research on consumer behaviour in the field of behavioural economics, many debatable issues have been noticed, such as irrationality, unpredictability, and emotionality in consumer

decision-making. In addition, attempts are continuously being made to formulate consumer behaviour in new models due to the dynamic changes taking place in their environment. In the last few years, consumers around the world have been affected by such phenomena as pandemic, economic crisis, and war, which have made it much more difficult to explain consumer actions through the prism of previously developed regularities or theoretical models. Uncertainty of the future, panic, stock-piling, and fearing for one's health and life have become motivators for consumers to take previously rare or completely new actions, which were also accompanied by individual feelings, motives, attitudes and emotions, difficult to generalise. Thus, current considerations on consumer behaviour on the market indicate the need to support the achievements of psychology.

The aim of this article was to indicate the current aspects of the use of psychology in consumer behaviour research and to highlight further directions of using psychology in relation to contemporary changes on the market. The following research questions were posed: what were the main aspects of the application of psychology in consumer behaviour research in the first two decades of the 21st century? Have the dynamic changes taking place on the market since 2020 developed the use of psychology in consumer behaviour research? What are the latest trends in the use of psychology in consumer behaviour research? What recommendations can be formulated for future directions of research on consumer behaviour using psychology?

The article is theoretical, and was developed on the basis of the subject literature. It is an attempt to present the dimensions of the use of knowledge and directions of research on consumer behaviour with particular emphasis on psychological issues. The author used the method of rapid review, which allowed to improve the collection of information (Arksey, Malley, 2005). Literature in the field of economics, management and psychology from two time periods was used: 2010-2019 and 2020-2022. The analysis of the former allowed to answer the first of the research questions, while the literature from the latter period to the others questions. The article is addressed to specialists in various scientific disciplines dealing with consumer behaviour, as well as to business practitioners and students.

### 2. Psychology in Consumer Behaviour Research – Selected Issues (2010-2019)

The present state of knowledge about consumer market behaviour is the result of empirical studies conducted over the course of the last few decades in many countries and it arises from the evolution of the economic views on consumption and its role in the economy. Moreover, the increasing humanisation of the economy emphasises consumer behaviour as an individual trait of both a particular household as well as its individual members.

As a result of the evolution of research on consumer behaviour, numerous definitions of it occur, while the contemporary ones are not assigned to one scientific discipline but they assume an interdisciplinary character. One of the most exhaustive definitions of consumer market behaviour was proposed by de Mooij, who defined consumer behaviour as a process of choice, purchase, use, management of goods and services, as well as experiences for the purpose of a satisfactory fulfilment of needs and wants (de Mooij, 2010, p. 93). In that definition the focus is spread over the elements of contemporary studies on consumer behaviour, among which the emphasis is placed on the attributes of an individual and on a decision-making process (an element of psychology and sociology), management and possibility of choice (an element of management and economics) as well as values and culture (an element of cultural studies).

At the beginning of the 21st century researchers of behavioural economics turned their attention to the following issues related to consumer behaviour, namely decisions taken by consumers may frequently be irrational, consumers are not able to predict their reactions and behaviour in the course of and after a purchase, furthermore, emotions start to play an increasingly significant role in making purchasing decisions (Reed, Niileksela, & Kaplan, 2013; Hursh, 2014; Zalega, 2015; Foxall, 2017; Mruk, 2017; Cartwright, 2018). Such an approach indicated a further need for identifying a consumer's psychological

profile by analysing the consumer's market behaviour. A consumer's psychological profile involves the impact of his or her personality, attitudes, habits, opinions, motives, emotions, norms and values, which consequently formulates a certain set of intangible factors (Lysonski & Durvasula, 2013; Pham, 2013; Gunter & Furnham, 2014; Achar et al., 2016; Schiffman & Wisenblit, 2015; Stasiuk & Maison, 2017). In practice, a description of psychological traits particular to a given consumer, referred to as psychographics, can be frequently encountered. It encompasses an analysis of a lifestyle, it describes consumer's actions, consumer's family, ties, ways of spending time, activity, interests, views, beliefs, opinions, preferences and priorities (Demby, 2011; Wójcik, 2017). Moreover, the following problems may be subject to studies of consumer market behaviour taking into account the following psychological aspects: examining consumer qualities, his or her preferences, analysing consumer opinions and attitudes, studying direct consumer behaviour, motives for consumer behaviour, consumer intentions (Edbring et al., 2016; Wójcik, 2017; Zaleśkiewicz, 2015; Zimbardo & Gerring, 2017; Ajzen, 2018).

Research areas in the sphere of psychology used to analyse consumer behaviour may therefore refer to the following issues:

- Area I consumer's personality, which is the result of his or her psychological traits, both the ones formed under the influence of external surroundings as well as inherited traits; it is what differentiates a consumer from other consumers operating on the market. It is the essence of an individual's particular differences, as a rule it is consistent and permanent. Within the scope of studies on personality the theories of not only types and qualities are differentiated, but also psychodynamic theories, humanistic theories, cognitive, social learning and ego theories. Each of these theories places emphasis on a different aspect, for instance: on learning processes, behaviour mechanisms, future, consciousness, nonconsciousness and other situational conditions (De Young, Hirsh, Shane, Papademetris, Rajeevan, & Gray, 2010, pp. 820-828; Gunter & Furnham, 2014; Mooij & Hofstede, 2011; Solomon, Russell-Bennett, & Previte, 2012).
- Area II perception, i.e. the processes of reception of external objects and events through senses and their interpretation on the grounds of the possessed experience. In this context perception is used for consumer behaviour analysis as an evaluation of influence exerted through sight, hearing, taste and smell. In line with psychological assumptions, perception processes create overall impressions and cohesive images in a consumer's mind, but the determination of which senses most strongly affect the attention depends on the personal qualities of a given individual. Furthermore, only a certain portion of information from the environment is consciously received and processed by a person, while some information is perceived subliminally (subthreshold stimuli), yet another portion of information remains on the periphery of one's attention (peripheral stimuli). Therefore, research, observations and experiments aiming to expand the knowledge of reaching consumer's senses are constantly evolving (Foxall, 2014; Schiffman & Wisenblit, 2015; Stasiuk, Maison, 2017).
- Area III learning. In the classic view of psychology, learning is a process resulting from acquired experience, which leads to certain behaviour. Learning about consequences is yet another approach explaining the process, which assumes that particular forms of behaviour may be repeated by an individual on the grounds of collecting the information about decision consequences (in the case of positive results, actions are repeated, in the case of negative ones they are modified). A consumer draws knowledge from two types of information sources: external and internal ones. External information sources for a consumer include: other people's opinions, articles, advertisements, online materials, experts' opinions, etc. However, internal sources play a greater role. Since the consumer possesses objective knowledge (what he or she actually knows) and subjective knowledge (what he or she believes to know). Internal sources of consumers' memory arise from their: semantic memory, episodic memory, explicit and implicit memory. Memory fallibility and the ability to draw conclusions also constitute crucial aspects in research on consumer knowledge (Batkoska & Koseska, 2012; Blythe, 2013; Foxall, Oliveira-Castro, James, & Schrezenmaier, 2011; Tyszka, 2010; Priest, Carter, & Statt, 2013; Stasiuk, & Maison, 2017).

- Area IV cognitive processes. Psychologists examine the processes that facilitate people's perception, the use of a language, reasoning, problem solving, formulating assessments and decision making. The purpose of studies focusing on recognising cognitive processes taking place in a consumer's mind is to provide information in order to create a market offer that satisfies buyers' expectations and needs (Foxall, 2014; Foxall et al., 2011; Sharma, 2014, pp. 833-840).
- Area V emotions, which from a psychological point of view, constitute a set of changes comprising physiological excitement, feelings, cognitive processes and behavioural reactions emerging as a response to a situation which an individual perceives to be of import. Apart from emotions, psychology also differentiates between the affect and moods. Emotions are short-lived, they concern a certain object or subject and they may be more intensive. Moods can be of longer duration, they are not linked to a particular situation, or object, while their intensity is lower than in the case of emotions. In turn, the effect is either a positive or negative, very short-lasting reaction, frequently of an automatic nature, and it is not subject to control (Achar, So, Agrawal, & Duhachek, 2016, pp. 166- 170; Soodan, & Pandey, 2016, pp. 163- 181; Williams, 2014, pp. VIII-XI).
- Area VI motivation, which means the process of initiating, guiding and sustaining a specific type
  of physical and mental activities; it encompasses the mechanisms of specific manner of behaviour.
  An analysis of motivation helps to explain the links between biological and behavioural processes,
  the reasons for which people undertake such actions, despite the obstacles and difficulties they
  encounter (Blythe, 2013; Borgardt, 2017, pp. 5-22; Foxall, 2014; Solomon, 2010).
- Area VII attitudes. The actions of a given individual are limited by the attitude adopted by him or her, i.e. a relatively permanent structure of behavioural tendencies. An attitude constitutes an emotional and evaluating relationship towards an object or it is a predisposition to the occurrence of such a relationship, which expresses itself in positive, negative or neutral categories. The most recent analyses of attitudes, dating back to the turn of the 20th century, comprise the questions related to nonconsciousness, uncontrolled elicitation of attitudes, hidden attitudes, and they indicate the need for the use of intermediary measurements in such analyses (Ajzen, 2018, pp. 529-552; Ajzen, Fishbein, Lohmann, & Albarracin, 2018, pp. 197-255; Hill, 2017, pp. 347-377; Shavitt, Lee, & Johnson, 2018, pp. 1089-1117).

Table 1 presents the methods of applying particular research areas from the sphere of psychology in analysing consumer market behaviour.

Table 1. Practical sides of applying research of psychological nature in the analysis of consumer market behaviour

Research area from the sphere of psychology	Practical application in studies on consumer market behaviour
1	2
I. Personality	Consumer typology
	Market segmentation
	Behaviour prediction
	Assessment of risks taken
	Studies of: self-fulfilment, acceptance, repression, fears, defensive ego, archetypes, goal achievement, control, mutual determinism, social intelligence, self-esteem with regard to consumer market behaviour
	Designing stimuli affecting consumer market decisions
	Stimulating consumer behaviour through stimuli
	Hidden stimuli
	Surprising a consumer (e.g. ambient advertising, product placement, guerrilla marketing)
	Sensory marketing
	Determining the intensity of stimuli to create a sensory impression
	Information noise and perception
	Observation of ways of reacting
	Stimuli differentiation
	Studies of: perception of individual senses, illusory perception, ambiguity,
	expectations, attitudes, stimuli assessment

1	2
III. Learning	Sources of consumer knowledge
	Objective and subjective knowledge
	Lay consumers vs expert consumers
	Studying changes in consumer behaviour under the influence of experiences
	Habituation or sensitisation of consumers to stimuli
	Environmental indicators of consumer learning and behaviour
	Analyses concerning differentiations of stimuli and their impact on consumer behaviour
	Restrictions in the process of consumer learning
	Cognitive processes and consumer learning
	Learning through observation
	Invoking fixed believes
	Memory: explicit, implicit; fallible
	Studies of: factors reinforcing behaviour, negative reinforcement, positive
	reinforcement, behaviour extinguishing, examining the impact of instinct on
	behaviour
IV. Cognitive processes	Cognitive processes and consumer learning
	Comparative studies on consumer cognitive skills
	Learning through observation
	Consumer adaptation
	Invoking fixed beliefs
	Critical thinking
	Product testing
	Studies on: prices (relation of e.g. brand – price; sensitivity to e.g. price);
	studies of names, packaging; studies of client satisfaction
V. Emotions	Emotional states and choices; extreme emotions during shopping
	Emotional assessment of stimuli
	Universality of emotions in consumer behaviour
	Culture and expressing emotions by consumers
	Functions of mood and emotions in consumer decisions
	Impulsive purchases
	Advertising as a source of consumer emotions
VI. Motivation	Instinctive actions and consumer learning
	Imitation of other consumers in one's own market behaviour
	Consumer personalisation
	Needs as motivators of consumer behaviour
	Hidden stimuli
	Nonconscious motives of consumer behaviour
	Studies of: impact of inherent factors on market decisions, attributes of con-
	sumer success and prestige, attributes of consumer failure, making individu-
	al decisions, making group decisions, consumer self-fulfilment
VII. Attitudes	Changes in consumer attitudes
	Positive and negative attitudes
	Ambivalent and neutral attitudes
	Attitudes and consumer experience
	Persuasion techniques
	Self-persuasion
	Shopping intentions
	Cognitive dissonance as a motivator for an attitude change
	Consumer's acquiescence, reciprocity and commitment
	Marketing communicators and consumer attitudes

Source: elaboration on the basis of (Zimbardo & Gerrig, 2017; Stasiuk & Maison, 2017; East, Wright & Vanhuele, 2014).

The above-specified areas of psychology application in analysing consumer behaviour demonstrate, on the one hand, that a final consumerism decision depends on the psychological traits of each individual, while on the other, defining all those psychological factors is very hard, sometimes even impossible for

a researcher, because each instance of human behaviour may be prompted by one or more reasons, whilst the consumer himself or herself is often unaware of the rules of their behaviour.

## 3. New Directions of Using Psychology in Research of Consumer Behaviour (2020-2022)

Until 2020, economic units, including consumers, lived in relatively constant and predictable conditions. Since the beginning of 2020, companies and households have found themselves in completely new situations as a result of the COVID pandemic, and then the rising costs of energy, fuels and raw materials, as well as the economic crisis and, moreover, warfare in Ukraine. The situation resulting from these changes forced consumers to rationalise spending in their households or reduce purchases, and make new financial decisions. According to consumers' declarations, from 2020 to 2022 their sense of financial security has decreased; their savings are diminished as they are forced to use them to maintain their current standard of living; they are concerned about their future jobs, and they also notice that their lifestyle has changed to a more modest one as they have reduced the frequency of purchases, pay more attention to prices than before, look for price promotions, choose cheaper substitutes of goods, and still expect an increase in the cost of living and increased expenses (*Transformacja konsumenta w Polsce*, 2022).

Research and theoretical considerations on consumer behaviour shaped in the era of the pandemic, the military operations in Ukraine, the energy crisis and inflation, are constantly being conducted. As a result of the emergence of the SARS-CoV-2 coronavirus, consumers had to adapt to the new reality in the era of the pandemic (Sheth, 2020; Yin, Yu, & Xu, 2021; Kirk & Rifkin, 2020; Eger, Komarkova, Egerova, & Micik, 2021; Naeem, 2020; Naeem & Ozuem, 2021). Adaptation to the new living conditions was for them the only way to continue social existence (Morgan, 2020; Wang, Liu, Du, & Wang, 2021; Svajdova, 2021; Hesham, Riadh, & Sihem, 2021). Among the adaptation activities, a growing tendency to access the online channel as the most frequently used shopping channel was observed. As a consequence, such a state of affairs automatically meant the weaker position of traditional in-store purchases (Belk, 2020; Hall, Prayag, Fieger, & Dyason, 2020; Moon, Choe, & Song 2021; Lăzăroiu, Neguriţă, Grecu, Grecu, & Mitran, 2020; Petcharat, Leelasantitham, & Heliyon, 2021).

However, in stationary shopping behaviours, some characteristic actions were also noticeable, which included activities related to health care (*How COVID-19 will permanently change consumer behaviour*, 2020; UNICEF; 2020). In turn, the worldwide crisis, inflation and warfare contributed to the intensification of certain actions on the part of consumers, and thus reflections on: consumers' concerns about sufficient availability of food, increased stockpiling, panic buying, fears for the future of their family, caring for health, increased propensity to save, and the desire to return to normality (Behnassi, & Haiba, 2022; Billore & Anisimova, 2021; Hassen, & Bilali, 2022; Singh, Kumar, & Kar, 2021; Somani & Kumar, 2021; Rayburn, McGeorge, Anderson, & Sierra, 2022).

Against the background of the changes taking place in the consumer environment, we can observe both new directions of using psychology in these studies, but also the continuation of existing research. For example, there is an interest in the literature on the subject:

- consumer ethics; in these studies, the current state of knowledge in this field is used, and the aspects of ethics are combined with rationality, irrationality and consumer awareness (Hassan et al., 2022);
- the consumer's use of a problem-focused or emotion-focused strategy to reduce the impact of difficult situations (Hong, Ahn, Camp, & James, 2022);
- the use of modern technologies in consumer behaviour research in order to obtain a complete picture of the consumer (neuroeconomics, which uses techniques of neural research of the basis of economic decisions, and neuromarketing, which studies how the brain processes information that shapes

consumer purchasing behaviour) (Alsharif, Salleh, Baharun, & Yusoff, 2021; Shahab, Ghazali, & Mohtar, 2021):

- spirituality in contemporary consumption is explored; attempts are made to consider a spiritual approach in understanding consumer behaviour, taking into account driving factors such as consumption economics, savings and health (Mehta, Saxena, & Purohit, 2020);
- research on psychological factors conditioning effective financial management in households is being deepened (Ingale & Paluri, 2022);
- research on impulse buying is being expanded (Spiteri Cornish, 2020; Naeem, 2020);
- research on the aspects of consumer trust and loyalty towards brands, producers and products is continued (Ozdemir, Zhang, Gupta, & Bebek, 2020);
- research on gaining experience by consumers in new market conditions is continued (Zhao, Xue, Khan, & Khatib, 2021; Tanrikulu, 2021);
- the theory of planned behaviour (Ajzen, 2020; Bosnjak, Ajzen, & Schmidt, 2020; Ulker-Demirel & Ciftci, 2020), the theory of self-determination (Gilal et al., 2020; Li, Cheung, & Tse, 2021) or the theory of gratification in relation to consumer behaviour is developing (Kujur & Singh, 2020), where the influence of psychological factors is taken into account in a special way.

The directions of using psychology in analysing consumer behaviour presented above are only a fragment of research and theoretical considerations conducted around the world. This research is continuously developing and covers many threads, as well as the achievements of many scientific disciplines are used simultaneously.

#### 4. Conclusion

The use of psychology to describe consumer behaviour is due to the fact that in the contemporary world decisions made by individuals are complex, while classic *homo oeconomicus* theories do not entirely reflect everyday market activities. A combination of scientific disciplines enables one to grasp the actual behaviour of individuals on the grounds of the functioning theories in the field of economics and management, but they are simultaneously enriched by the knowledge of human tendencies.

At the beginning of the 21st century, the traditional approach of applying psychology to consumer research was predominant. The influence of basic psychological factors on the actions of consumers on the market was analysed, such as perception, emotions, personality, motivation, attitudes, and the way of making decisions. Research issues that were widespread at that time were: processing information about products and services by the consumer; formulating judgments and opinions; acting under the influence of positive or negative emotions expressing emotions towards advertisements or promotional activities impulse buying; motives for acting on the market, shaping attitudes towards products, brands, manufacturers, market messages; the course of the decision-making process; the influence of personality on market decisions.

The changes that have taken place in the consumers' environment since 2020 influenced not only their actions in reality, but are also reflected in the theory and analysis of consumer behaviour. Uncertainty, panic, fear for health and the future are the main motivators that determine the behaviour of consumers. Consumers' actions were accompanied by psychological influences other than previously believed, such as spirituality, gaining experience, willingness to take risks, or ethical actions. Additionally, others, including the impact of personality, attitudes and emotions (so far also described in market analyses of consumer activities), have gained particular importance in these difficult times.

The changing environment in which consumers operate means that research on consumer behaviour must be continuous and multidimensional at the same time. Market researchers very often struggle with such problems that the methods they use to collect and analyse information do not allow them to fully interpret and use data about what consumers think and experience. Psychological analyses should be helpful in this case. Using the achievements of this scientific discipline allows to fill research

gaps, because the use of psychology in consumer behaviour research on the market can enrich the information that is obtained on the basis of quantitative and qualitative research, as well as confirm or negate existing theories.

The directions of using psychological aspects in market research of consumer behaviour presented in this study show that the obtained information can create additional dimensions of the consumer's activity, which will make the picture more complete and precise. One should also note the limitations in the study of contemporary consumer behaviour, namely the parallel use of the achievements of various scientific disciplines, and the simultaneous use of various research methods, including technological novelties, give not only positive effects, but can also lead to information overload, therefore a researcher who takes up the challenge of deepening and supplementing his/her knowledge often faces pitfalls of excess information and incompetent or incorrect interpretation.

However, there is no doubt that it is important to use psychology in consumer market research. It is a direction of the future and constantly developing. At the current stage, however, due to the already huge scientific achievements and constantly undertaken new research and analyses, this field requires some systematisation. Firstly, it is important to organise theories in the field of consumer behaviour, both from the point of view of individual scientific disciplines (including psychology) and interdisciplinary ordering by reviewing the literature according to precisely selected criteria supported by solid arguments. The next step should be to organise, according to clearly defined criteria, the results of research in the field of consumer behaviour with the use of psychological aspects. In the case of new research concepts, it is also worth introducing precise arguments for the need to conduct new analyses and introduce new methods of researching consumer behaviour using elements of psychology in order to prevent the dispersion of information or the information chaos.

On the grounds of the considerations presented in this paper, the issue of importance to future analyses and research trends of consumer behaviour chiefly regards the development of a methodology of studies encompassing the achievements of the distinguished disciplines of science and constant systemisation of knowledge in this regard. In order to obtain a complete picture of consumer market behaviour, the approach of classical economics and marketing must undoubtedly be taken into account on a par with the psychological approach, since only then will the resultant consumer image be complete.

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## Zastosowania psychologii w analizie zachowań konsumentów – wybrane zagadnienia

**Streszczenie:** Psychologia odgrywa szczególnie istotną rolę w badaniu zachowań konsumenckich, ponieważ wykorzystuje badania naukowe na temat natury człowieka oraz czynników społecznych, poznawczych i emocjonalnych w celu lepszego zrozumienia zachowań jednostek. W artykule przedstawiono aspekty wykorzystania psychologii we współczesnych badaniach zachowań konsumenckich. Cele prezentowanego artykułu stanowiły nie tylko prezentacja aktualnych kierunków wykorzystania psychologii w badaniach zachowań konsumenckich, ale także wskazanie dalszych w nawiązaniu do współczesnych zmian na rynku. W teksście zawarto rozważania teoretyczne oparte na literaturze dotyczącej tematu.

Słowa kluczowe: zachowania konsumentów, konsumpcja, psychologia