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# CONSUMER BEHAVIOUR FROM THE PERSPECTIVE OF BEHAVIOURAL ECONOMICS PRINCIPLES

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**Purpose:** The paper aims to determine how consumer behaviour and attitudes are shaped in the framework of behavioural economics principles. It analyses input from a survey about purchase decisions, pointing out the critical role of emotional factors in impulse purchases. The survey is preceded with a background of behavioural economics as an interdisciplinary field at the interface of economics and social sciences, including psychology.
**Design/methodology/approach**: The survey was conducted in 2024 on a sample of 120 respondents. The research tool was a survey questionnaire. The study employed the CAWI technique (Computer Assisted Web Interviewing), whereby respondents fill in an online questionnaire on a computer or mobile device. The respondents could access the questionnaire through social media. The sample consisted of adult consumers of the general product and service market.
**Findings:** The results show that most respondents are aware of the role of emotions in purchase decisions. The same concerns applying social influence techniques in marketing; half of the respondents are aware they succumb to it. Note that emotions can be effective marketing tools, such as manipulation, when their influence is covert. Individuals with high awareness become more immune.
**Research limitations/implications**: Behavioural economics is a developing academic field. As a relatively new economics sub-discipline, it facilitates interesting, interdisciplinary research. Today, its area of interest reaches far beyond standard marketing to neuromarketing methods or the application of behavioural tools in the public sector.
**Practical implications:** The practical application of behavioural economics focuses on guiding purchase decisions through marketing efforts. Moreover, considering the growing interest in and awareness of the effectiveness of behavioural tools, they can be universally deployed in various fields of public policy.
**Social implications:** Behavioural economics is increasingly widespread in modern decision-making in such domains as economics (financial decisions), marketing (purchase decisions), education, and health care. In general, behavioural economics focuses on all those practical instances where the human factor plays a greater role than was previously expected.
**Originality/value:** The paper should be of interest to all researchers curious about behavioural economics, i.e. a merger of economics and social sciences. It presents the results of research on emotions and their impact on consumer purchase decisions and consumer self-awareness of susceptibility to social influence.

**Keywords:** behavioural economics, irrational behaviour, consumer behaviour, emotions, social influence.
**Category of the paper:** research paper.

## 1. Introduction

### Behavioural economics and its impact

Behavioural economics is a rapidly growing subdivision of modern economics. Its characteristic features are interdisciplinarity and association with empirical and experimental research. At its core, it questions the assumption of consumer rationality, which would have the buyer making choices based on an ordered set of preferences. Homo economicus is at the centre of economics theories, classical and neoclassical both (Zalega, 2015; Wilson, 2020).

Behavioural economics focuses on the potential of irrational factors in an individual's decision-making. It investigates the drivers of economic decisions and their consequences (Miller et al., 2016). Therefore, behavioural economics means ‘going beyond any limits imposed by the concept of homo economicus’ (Zalega, 2015, p. 7).

The interest in behavioural economics has been on the rise since the 1960s (Cartwright, 2011; Mączyńska, 2018; Trogler, 2021). But its origins date much further back. Its roots are believed to lie in psychological behaviourism, connected, in a way, with classical associationism of British empiricism represented by John Locke and David Hume (Graham, 2000; Niemcewicz, 2018). However, in actual fact, the true beginning of behavioural economics was A. Smith's *The Theory of Moral Sentiments*, where he explains that people are not driven solely by their own interests but feel a natural ‘sympathy’ towards others. This complementary combination of economics and psychology has been obvious for decades (Cartwright, 2011; Geiger, 2014). Then, in the early twentieth century, they both started to function independently, and neoclassical economics abandoned the behavioural context. This perspective was initiated by Vilfredo Pareto, who wrote, ‘Pure political economy has therefore a great interest in relying as little as possible on the domain of psychology’ (Cartwright, 2011, p. 5), arguing for economists to focus solely on facts instead of motives for behaviour.

Behavioural economics gained much attention recently after Richard H. Thaler was awarded the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel ‘in 2017 for his contributions to behavioural economics’ (The Nobel Prize, 2017). The starting point for Thaler, but also for behavioural economists in general, was their sceptical view of theories of neoclassical economics, which had been the mainstream economics programme since the nineteenth century. The problem economic researchers had with the ‘Nobel Prize’ for Thaler was that he had disproven many established theories of mainstream economics with research on individual human behaviour. The main concern was with considering the homo economicus model as the only proper theory for describing the economic decisions of individuals. Thaler demonstrated that cognitive aspects are very important as they affect the economy and market by guiding decisions. Thaler's research was considered ‘a path towards bringing economics theories closer to real life’ (Mączyńska, 2018, p. 247; Thaler, 2016). Note that in its extended grounds for the award, The Royal Swedish Academy of Sciences stated that ‘in total, Richard Thaler's contributions have built a bridge between the economic and psychological analyses of individual decision-making. His empirical findings and theoretical insights have been instrumental in creating the new and rapidly expanding field of behavioural economics, which has had a profound impact on many areas of economic research and policy’ (The Nobel Prize, 2017).

Behavioural economics should not be considered a coherent theory. Instead, it is a mixture of interweaving schools and programmes; a ‘wide, heterodox research project comprising hypotheses, tools, and techniques’. Its primary characteristic is that it opposes the paradigm of classical economics (Polowczyk, 2009, p. 4). Put simply, as a discipline, it focuses mainly on verifying ‘the assumptions of neoclassical and classical economics through results of psychological and sociological research’ (Niemcewicz, 2018, p. 10). According to R. Thaler (2016, p. 1580), ‘behavioural economics (BE) is the science that studies actual behaviour of economic agents and corresponding psychological factors that influence economic behaviour’.

Cartwright (2011, p. 3) defined it thusly: ‘behavioural economics is about understanding economic behaviour and its consequences (…) It's also about understanding whether people make good or bad choices, and could be helped to make better choices’, or from a slightly different perspective: ‘behavioural economics is about applying insights from laboratory experiments, psychology, and other social sciences in economics’ (Cartwright, 2011, p. 4).

Max Witynski pointed out the differences between behavioural and neoclassical economics (Barry, 2022, p. 6). ‘Behavioural economics combines elements of economics and psychology to understand how and why people behave the way they do in the real world. It differs from neoclassical economics, which assumes that most people have well-defined preferences and make well-informed, self-interested decisions based on those preferences. Behavioural economics examines the differences between what people “should” do and what they actually do and the consequences of those actions’ (Barry, 2022, p. 6).

The essence of behavioural economics lies in drawing on the achievements of social sciences, such as psychology and sociology, as well as biological sciences, such as neurobiology, to account for irrational behaviour (Stewart, 2005). Its primary research objective is to analyse human behaviour and driving forces involved in decision-making. Importantly, behavioural economics stands on the shoulders of classical economics and social sciences to more precisely describe economic phenomena. The utmost goal of including psychology in purely economic investigations is to find new approaches and solutions for more effective and precise resolution of problems an individual faces when making decisions. Some of these choices affect the person's personal and professional future (Miller et al., 2016). With the help of psychological and sociological sciences, behavioural economics endeavours to analyse individuals' behaviour as they make a choice. It strives to demonstrate that when making a decision, the individual is under the constant influence of various limitations, emotional states, and surrounding stimuli. Therefore, the main and primary assumption of behavioural economics is to eliminate any premises of rational decision-making.

Behavioural economics considers a diversity of factors affecting human decision-making. Some notions crucial for the operationalisation of behavioural economics include (Zygan, 2013, p. 13):

a) heuristics is a method of discovery, a problem-solving procedure, and a technique for creative expression of thoughts. Heuristics is a simplified method for assessing and solving problems. A person who employs heuristics in information processing skips some data and ‘cuts corners’;
b) framing means emphasising a specific perspective, for example, regarding benefits and losses;
c) mental accounting involves assigning costs to ‘mental accounts’ and considering each separately as a function of potential gains and losses.

Studies in this sub-discipline of economics based mainly on experiments and observations are aimed primarily at analysing and describing behaviour. The primary focus is any behaviour different than ‘what economics calls rational’ and is considered a ‘cognitive bias’ (Polowczyk, 2010, p. 1; Kaleta, 2019).

Although neoclassical economists do permit certain cognitive limitations that make individuals ‘make bad choices’, they do not believe these obstacles affect macroeconomics and tend to disregard them. Behavioural economists, on the other hand, are not convinced. They believe that ‘in aggregate, errors do not cancel each other out but rather reinforce each other to be more pronounced and contribute to the fallibility of the economy even more’ (Kotlarek, 2014, p. 112).

Congdon et al. (2011) believe that deviations from the principle of rationality helped shape outlooks on decision-making mechanisms. In neoclassical economics, which is the traditional economic theory, individuals are rational in making decisions and strive for maximum profits. However, individuals do not always behave rationally when making decisions (Tversky et al., 2000; Alm et al., 2013; Sijabat, 2018). This is where the space for behavioural economics opens up.

As suggested by R. Sijabat (2018, p. 80), in behavioural economics, an individual's behaviour and actions are considered as resulting from an interaction between two factors:

- ‘normative preferences, referring to individual goals and activities believed to promote optimal welfare,
- revealed preferences, the decisions that may not always promote optimal welfare’.

Unfortunately, optimal welfare is not always achievable because an individual's choices and decisions are affected by certain unconscious predispositions or susceptibilities. The first type is emotions, which can belie the reality. Other types include problems due to different perceptions of reality, which in itself can be distorted, fear of new, unfamiliar, undefined situations, and the influence of people around the individual (Kaleta, 2019; Ogaki, 2017). Therefore, one must not disregard the susceptibility of individuals to errors when making decisions, which may lead to decisions not always being in their best interest (Pereira, 2016).

Neuroeconomics is an interesting part of behavioural economics. It employs an interdisciplinary approach whereby brain function imaging is used to improve economic insights. Neuroeconomics is defined as ‘a field that investigates the physiological and neural basis of decision-making processes, integrating concepts from behavioural economics with observations of the central and peripheral nervous system to understand the reasons for irrational behaviours and improve human decision-making’ (Grewal et al., 2016, p. 143). Neuroeconomics takes it upon itself to explain the decision-making process. According to C.F. Camerer et al. (2005) insights offered by neuroeconomics may affect how researchers investigate two traditional problems of economics: 1) intertemporal choice and self-control and 2) decision-making in circumstances characterised by risk and uncertainty (Miłaszewicz, 2017, p. 259).

R. Yu and X. Zhou (2007) identified research areas that might interest neuroeconomics but also ‘significantly contribute to economics theories’ (Miłaszewicz, 2017, p. 259). They are:

1) calculation of utility in decision-making: neuroeconomic research confirms previous economics principles of calculating utility.
2) the role of emotions in economic decisions: the traditional economics approach is to ignore the effect of emotions in decision-making. It is mostly because emotions are hard to quantify.
3) economic decisions in the social context because decision-making always takes place in social circumstances. People make decisions based on expectations regarding the potential actions of others and their effects. Neuroeconomic research found evidence to support this view.

By facilitating the combination of economics and psychology, neuroeconomics builds new research methods (Camerer et al., 2005; Greco, 2018). For instance, the results of neuroeconomics paved the way for an economic map of the brain, which offers evidence that certain brain activity is the strongest when the person is making economic decisions (Miłaszewicz, 2017, p. 259). Brain imaging can be considered the most popular neuroscience tool today.

Nevertheless, orthodox economists voice several objections to the core assumptions of behavioural economics. Their criticism focuses on the experimental method employed in the sub-discipline. According to the opponents of the behavioural approach, experiments prevent the generalisation of an individual's market behaviour to entire populations. Especially when behavioural experiments are set mainly to ‘identify patterns in how individuals or small experimental samples respond to stimuli’ (Zalega, 2015, p. 18; Ogaki, 2017). Other complaints regarding behavioural experiments in economics concern the application of analytical criteria that are difficult to measure, such as influencing an individual's decisions or the impact of the social environment (Niemcewicz, 2018).

Another controversial topic is the investigation of decision-making processes by neuroeconomics, a sub-discipline of behavioural economics. Although critics of neuroeconomics do not question the existence of correlations between brain activities in different areas, they challenge the possibility of identifying unambiguous causal relationships for behaviour. G.W. Harrison (2008) enumerated the main controversies surrounding the use of neurobiology techniques in economics. They focus on two main problems: how neurobiological data are acquired, and how they benefit the economics. These doubts actually concern the ‘idea of insights into the human brain as a way for improving the state of knowledge about economic behaviour’ (Zalega, 2015, p.18).

## Consumer behaviour

Consumer behaviour is investigated mainly by sciences interested in ‘various aspects of the purchase process and consumption of goods and services’ (Sobczyk, 2018, p. 171). Economics and management are among them, as are social sciences such as sociology, psychology, and anthropology. The very term ‘consumer behaviour’ was used for the first time in the early twentieth century by an American economist, W.H. Reynolds (Sobczyk, 2018; Schoultz et al., 2022).

Consumer behaviour can be defined as ‘a multidisciplinary subdiscipline of marketing characterised by the study of people operating in a consumer role involving acquisition, consumption, and disposition of marketplace products, services, and experiences’ (MacInnis et al., 2009, p. 900; Malter et al., 2021). Consumer behaviour can also be considered a process involving the ‘acquisition, consumption, and disposition of goods, services, time, and ideas by decision-making units’ (Lee, 2022).

Others define it as ‘the totality of consumers' decisions concerning the acquisition, consumption, and disposition of goods, services, time, and ideas by human decision-making units’ (Hoyer et al., 2008, p. 3). G. Antonides and W.F. van Raaij (2003, p. 24) proposed a much broader view of consumer behaviour. For them, it is ‘mental and physical activities combined with their motives and causes performed by people and groups in a consumption cycle to pursue their goals and values, leading to satisfaction and welfare, taking into consideration individual and societal consequences of these actions’ (Sobczyk, 2018, p. 172).

Research on consumer behaviour covers observation and also analysis of purchase decisions. Economics views these decisions in two ways, as mentioned above. In the traditional perception of classical economics, the consumer is a rational individual for whom marketing factors are critical: the price, product specifications, or place of sale. In this case, the consumer's financial resources seem to be a critical factor. Whereas behavioural economists see purchase decisions differently. For them, the consumer can be irrational in their choices and subject to certain subconscious processes (Porowska, 2016, p. 72). As noted by Niemcewicz (2018, p. 13), ‘observations offered by behavioural economics tore down two pillars of homo economicus: self-interest and rationality of choice’ (Kesternich et al., 2017).

The literature offers a variety of models representing the consumer decision-making process. R. East, M. Wright, and M. Vanhuele (2014, p. 20) proposed three main consumer decision models:

- ‘The cognitive model assumes consumer decisions are based on rational analysis. The consumer reviews all potential gains and losses connected with each product or service.
- The reinforcement model, where consumer decisions result from the environment, especially rewards or losses brought by the decisions. Such reinforcements can be positive or negative.
- The habit model, where consumption behaviour stems from learnt behaviour, which is moulded by the setting and society. This model is very general and assumes a properly functioning market of goods and services’ (Żak, 2017, pp. 29-30).

An analysis of the problem of purchase decision-making requires considering two important aspects: cognitive and motivational. The cognitive aspect is related mainly to the individual's subject-matter knowledge, ‘which allows them to formulate possible variants of actions and participate in the consequences of the actions’ (Szcześniak, 2020, p. 379). The other motivational aspect enables the consumer to verify the market offering by evaluating the attractiveness of the variants they choose from.

Consumer behaviour is affected by numerous factors. Internal factors include personality and demographic determinants, such as sex, age, education, income, or lifestyle. Other internal drivers are psychological determinants, including personality, motives and habits, perceptions of attitudes, learning, risk tolerance, and lifestyle. Some external factors that affect an individual's economic decisions are such economic factors as price, income, place of sale, and advertising. Social and cultural determinants of consumer behaviour are mainly social groups, reference groups, or trendsetters (Zwierzyński, 2017; Tatlilioglu, 2014).

The literature divides the factors into cultural and marketing forces, considering the diversified attitudes to the problem. Moreover, as noted by Korneta and Lotko (2021), the broad range of classifications stems from differences in the characteristics of purchase decision conditions in different industries and for different customer segments.

Recently, marketing efforts have been more focused on psychological aspects. This approach is consistent with the concept advocated by representatives of behavioural economics (Porowska, 2016). People are usually oblivious to the processes in their minds and cannot judge how much their behaviour is affected. Nevertheless, this shortcoming does not prevent the consumer from offering seemingly logical arguments justifying the behaviour.

Notably, the consumer perceives their behaviour as completely under their control, while the truth may be quite the opposite. This information is pivotal for market research (Graves, 2010).

According to A.J. Kimmel (2013), there are five psychological aspects affecting consumer behaviour: personality and lifestyle, motivation, perception, decision-making, and social behaviour. Purchase decisions are formed by combining these aspects with consecutive stages the consumer passes through. The stages were defined by M.R. Solomon (2019). They are: ‘problem recognition, information search, evaluation of alternatives, product choice, and post-purchase evaluation’ (Schoultz, 2022, p. 1). The decision is realised during these stages the consumer has to go through.

According to H. Mruk (2017, p. 85), new research methods are the key to a ‘higher-level’ understanding of consumer behaviour. It concerns mainly investigations into the brain's response to stimuli facilitated by new technologies. H. Mruk (2017) gives an example of EEG (measurement of electrical activity in the brain), which can visualise the activation of individual parts of the brain. Other instances include fMRI (functional magnetic resonance imaging), which tests brain activity (controversial because of its invasiveness) and eye-tracking devices. The latter can be used to learn which shelf and which specific spot the consumer watches and for how long.

Consumer behaviour investigation methods are thriving, and many more are used than just those listed above (Mruk, 2017; Chrysochou, 2017). Some institutions today use proprietary, patented tools in addition to generic research methods. Their research capabilities include testing brain responses to advertising videos, useful for business.

Still, such tests come with no fewer than two problems. First of all, the fact that one can identify the response of a specific brain area to a stimulus, such as structures linked with emotions, does not mean that the stimulus will cause a specific consumer behaviour. It is because decisions are usually driven by several stimuli (Mruk, 2017, p. 85).

The other problem with neuromarketing research is ethical. Its opponents argue that it may reinforce marketing manipulation and choice creation (Niemcewicz, 2018; Harrison, 2008). Therefore, it is necessary to obtain an ethics committee opinion when designing an experiment or brain research method. The committees grant recommendations regarding the research before it is commenced. It is a new and specific situation compared to classical marketing research, which employs mainly quantitative methods or primary data analysis, such as statistics (Mruk, 2017, p. 87).

## 2. Research methods and results

The primary objective is to determine how consumer behaviour and attitudes are shaped in the framework of behavioural economics. It analyses input from original research on purchase decisions, pointing out the important role of emotional factors in impulse purchases. The point of reference for the survey is the background of behavioural economics as an interdisciplinary field at the interface of economics and psychology presented above. Moreover, the survey results for active consumers identify sales process manipulations and consumer self-awareness of their susceptibility to social influence.

The survey was conducted in 2024 on a sample of 120 respondents. The research tool was a survey questionnaire. The study employed the CAWI technique (Computer Assisted Web Interviewing), whereby respondents fill in an online questionnaire on a computer or mobile device. The respondents could access the Google Form questionnaire through social media.

The CAWI method was used because it is very often employed in market and opinion research. It offers quick and easy data acquisition from a large number of respondents, which ensures a complete insight into opinions or a market. The sample was diversified in terms of age, sex, residence, and education.

It consisted of adult consumers of a wide product and service market. Most of the respondents were women (nearly 54%). Another dominant subgroup were younger people; participants under 44 constituted over 69% of the sample. The least numerous were seniors aged 65 and more. The small share of the oldest participants is not surprising because of the survey method (an online questionnaire).

The largest group were respondents with secondary education (about 34%), and over one-fourth of all the participants had occupational educational background. The smallest group in terms of education were people with primary education (only 8%). A university degree was declared by 18% of the sample. Most of the respondents were married (nearly 53%) (Table 1).

**Table 1.**
*Respondent profile by sex, age, marital status, and education [%]*

| **Specification** | | **Respondents** |
|---|---|---|
| Sex | F | 53.8 |
| | M | 46.2 |
| | 18-14 | 22.1 |
| | 25-34 | 23.3 |
| | 35-44 | 24.0 |
| | 45-54 | 12.7 |
| | 55-64 | 11.7 |
| Age | 65 and over | 6.2 |
| Marital status | married | 52.6 |
| | single, divorced, widow/er | 47.4 |
| Education | primary | 8.2 |
| | basic vocational | 25.4 |
| | secondary | 34.2 |
| | post-secondary | 14.2 |
| | higher | 18.0 |

Source: original work.

An investigation into the purchase decisions of the respondents should start with their declarations of where they shop most often (including online stores). Another worthwhile driver is the answers specifying factors significantly affecting their purchase decisions. Both questions were multiple-choice questions.

Responses to the first one indicated that the respondents most often shopped in supermarkets (about 67% of the answers). Slightly less popular, but still important, was shopping in shopping centres and online (both about 50%). The respondents were much less eager to choose corner shops (about 21%) and local open-air markets (nearly 13%).

The next question investigated what guided the respondents the most during shopping. The most common option was price. It was critical for over 86% of the sample. Slightly less popular drivers were special offers (71%) and quality (61%). A third-party opinion from friends, family, or a public figure seemed to be rather important for about one-fifth of the respondents. The least weighty factor for purchase decisions was comparison with another brand. This option was selected by a few respondents (Figure 1).


**Figure 1.** Sample structure for question 'What is your primary guiding factor when shopping?'
Source: original work.

Behavioural economic research on consumer behaviour also considers emotional circumstances, such as purchase decisions, price analysis, or the impact of senses (Mruk, 2017, p. 82). But are consumers aware that their choices are affected by emotions? The present results indicate that the declared respondent awareness is outstanding. Nearly 89% of them claimed they were aware that intense emotions may affect consumer behaviour and decisions when shopping. The option linked with the opposite view and the percentage of respondents declaring they never heard about this association were similarly scarce (6% and 5%, respectively) (Figure 2).

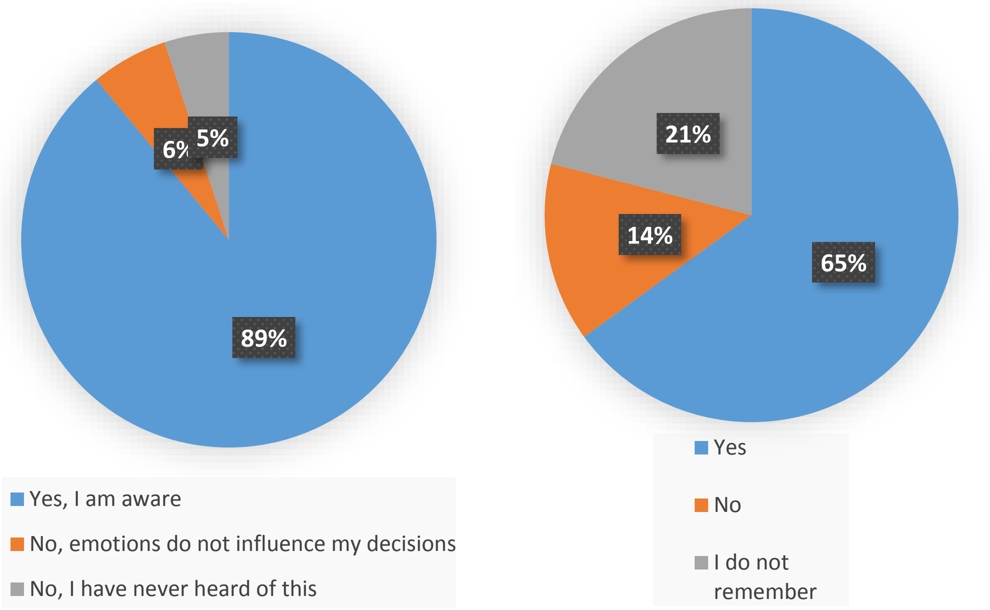


**Figure 2.** Sample structure for questions ‘Are you aware that strong emotions may affect consumer behaviour and purchase decisions?’ and ‘Have you ever made a purchase when in an intensive emotional state?’

Source: original work.

The issue of the role of emotions in purchase decision-making was expanded with the question of whether the respondents had ever made a purchase when in a state of intensive emotions. Apparently, it was a rather common situation. About 65% of the respondents chose the affirmative option, while only 14% opted for the opposite one. Over one-fifth of the respondents could not recall such an event (Figure 1).

A purchase in an intense emotional state may not only be unnecessary but also a regrettable commitment. The respondents were asked about such consequences. As many as 94% of the respondents confirmed that they sometimes bought products or services they did not need. The frequencies of such purchases varied: 24% chose ‘very often’, 23% ‘often’, and 47% ‘occasionally’. Only 6% of the respondents declared they had never bought an unnecessary product or service.

Spur-of-the-moment purchases are also linked with overspending compared to the planned amount. Only 3% of the respondents never experienced it, and half of the sample went through excessive spending very often. It was a common problem for 23% and a sporadic issue for 24%.

Consumer purchase decisions are critical for understanding the market. Therefore, consumer behaviour analysis gives a better insight into consumer needs and preferences. This way, the product and service portfolio can be better adapted to consumer needs. Nevertheless, understanding this behaviour and identification of factors, such as psychosocial ones, that affect it paves the way for consumer manipulation (Forum PPP, 2024;

Greco, 2018; Jovanovic et al., 2020). Therefore, were the survey participants aware that social influence is inherent in marketing and that they are also affected by it?

Interestingly, as shown in Figure 3, the respondents declared they were fully aware of sellers using manipulation. As many as 86% claimed they saw ubiquitous manipulation. Mere 3% made no such observations, and a few respondents could not answer the question (Figure 3). Interestingly, when asked whether they fell prey to social influence when shopping, only 14% clearly confirmed. Almost half of the sample agreed conditionally ('generally yes'), and 7% chose the negative answer.

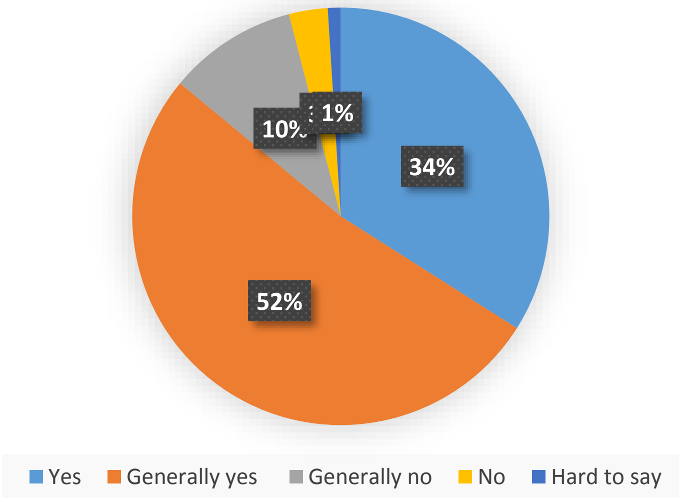


**Figure 3.** Sample structure for question 'Are you aware of and see marketing/seller manipulation?'
Source: original work.

Moreover, nearly 60% of the respondents declared they could give examples of manipulation by marketers/sellers aimed at consumers. The respondents most commonly offered multipacks and retail product placement as examples. The respondents indicated that products are never placed randomly in stores, such as at the checkout counter or at eye level. Another example of social influence in marketing that the participants enumerated was free samples and arguments from authority or expert endorsement. Other marketing tools they indicated included lower prices before special seasons, higher product prices at the shop window (which makes other products in the store seem cheaper), eye-catching advertisements, leaflets, and banners, Black Friday or other seasonal sales, loyalty programme discounts, and aroma, for example of freshly baked bread.

## 3. Discussion

Principles of behavioural economics have been growing more popular recently. They mainly question the rationality of market choices and decisions made by customers. Researchers from the University of Łódź investigated the grounds for taking economic theories into account in business decision-making with a 2017 survey among managers, students, and academics. The objective was to verify thirteen selected fundamental economic theories of buyer behaviour and market decisions. The authors concluded, factoring in methodological limitations, that their results undermined traditional economic principles of buyer choices. The respondents can be considered to have questioned the relevance of classical economic theories of buyer behaviour (Kozielski, 2018).

A work by W. Świder (2020) offers a broad review of selected effects and heuristics studied with behavioural economics. It aimed at determining how the use of irrational behaviour can help improve the outcomes of business marketing efforts, for example. The sheer multitude and diversity of the examples proposed by the author suggest the potential of behavioural economics. Many heuristics and effects listed in the article are employed in practical marketing operations. Still, according to the author, it is hard to clearly indicate the strategies that are yet to be employed in business practice. It may be because many promotional strategies are confidential.

Authors of a study on 400 respondents from Podkarpackie and Małopolskie Voivodeships, Poland reached rather ambiguous conclusions regarding the impact of emotions on purchase decisions. They strove to identify associations between emotional and rational drivers of purchase decisions affected by product placement. The authors concluded that purchase decisions result mainly from rational causes, although ‘the influence of emotional stimuli is apparent, and they may also be rationally justified in many cases’ (Cyran et al., 2017, p. 44)

On the other hand, a survey of customers at Miniso demonstrated that emotions consumers experience directly impact their intent to buy a product again. The authors focused, in particular, on impulse purchases that are made based on emotional factors and may increase consumer willingness to repurchase (Azizah et al., 2024).

The important role of emotional factors in impulse purchases was confirmed in a CAPI survey on a representative sample of 1000 Poles aged 15–74 from various places in Poland.

The results show that over half of the participants (53%) admitted to impulse shopping from time to time. In a subgroup of those who experienced pangs of guilt when buying unnecessary things (42%), most were optimistic about their sustainable consumption competencies, while among those who felt happy (18%), most estimated their sustainable consumption competencies negatively (Dąbrowska, 2024).

The impact of emotional content on purchase decisions in the context of online product reviews was noted by authors of a study on 106 Internet users. Their results show that the reliability of reviews is important for purchase decisions, but only regarding negative online reviews by customers. The results indicate positive emotions related to online customer reviews and may be valuable to both sellers and customers (Guo et al., 2020).

A study analysing emotions and investigating their importance in the purchase process in the cosmetic industry also considers them a critical factor. The online and offline survey involved 125 respondents (consumers). Its results show that nearly all the respondents (91%) believed emotions to be highly relevant to their consumer behaviour. Interestingly, positive emotions were found to be more impactful in the industry, according to the responses (Jovanovic, 2020).

Slovak researchers also investigated the problem of building emotional relationships (Vrtana et al., 2023). This study focused on the impact of Dove advertising on the intensity of consumer emotions and their irrational purchase decisions. Its authors conducted an online survey with a psychodiagnostic tool (the subjective emotional, habitual well-being scale, SEHP) on a sample of 417 Slovak consumers. The results show that emotions brought by advertisements vary depending on age, for example. Moreover, emotional references in advertisements may build an emotional relationship with the brand. Furthermore, the authors concluded that the current advertising trends of using emotional references may promote impulsive and irrational purchase behaviour. Additionally, consumers may become part of the brand, which promotes emotional bonding between consumers and the brand.

Eventually, behavioural economics principles may be employed in much more than just marketing. Public administrations that eagerly employ the latest achievements have had behavioural economics tools in their portfolio for over a decade. The most pronounced of them are the World bank, OECD, and the European Commission. A Report by the Polish Economic Institute (2019) includes analyses and recommendations on how to apply behavioural economic knowledge in the public sector. According to the report, only 58% of participating officials declared ‘attempting to understand or change how citizens behave’. Organisational units, finance and budgeting divisions, and legal departments were among those that refrained from such attempts.

The behavioural perspective can account for what is ignored in standard economic and legal analyses but is still important to the public good.

The authors of the report pointed out that the behavioural approach may help the Polish public sector to better integrate its operations with other efforts that are part of a wider administrative reform, such as computerisation, service design, or big data–based decision-making.

Another example of how behavioural economics principles can be put into practice is research by the World Bank (Hernandez et al., 2017) for the Polish government. The investigation concerns the tax administration in Poland. The sample were all natural taxpayers in Poland who were more than PLN 50 in arrears, which makes 149,925 people. The taxpayers were randomly assigned to groups. Some of them received standard tax demand letters (as used by Polish Revenue Offices), and others received one of nine letters drafted according to behavioural economics principles, such as a notice of oversight, a letter concerning public good (positive or negative tone), or a letter appealing to social norms. The results show that behavioural letters improved tax recoverability rates and reduced debt levels compared to traditional admonition letters. The conclusion was that interventions where behavioural tools are used may bring financial benefits.

## 4. Conclusions

Behavioural economics, an interdisciplinary field at the interface of economics and social sciences, helps analyse human behaviour and motives in decision-making processes. The goal of including psychology in purely economic investigations is to find new approaches and solutions for more effective and precise resolution of problems a person faces when making decisions. Sometimes, these decisions affect their personal and professional future in the long term. Other times they concern typical marketing, momentary choices consumers make virtually every day.

The study analyses input from a survey about purchase decisions, pointing out the important role of emotional factors in impulse purchases. The paper also points out manipulations in the sale process.

There are three main factors guiding the respondents' purchases. These are price, special offers, and product and service quality. Such factors as brand or advertising were selected by about every tenth respondent.

Nearly all the participants (89%) were very much aware of the strong influence of emotions on consumer behaviour and their purchase decisions. The other participants were of the opposite opinion (6%) or had no knowledge in this regard (they had never heard about it, 5%). Interestingly, over two-thirds of the respondents declared rather frequent purchases in strong emotions, and merely 14% chose the opposite option. Impulse shopping caused remorse in 94% of the respondents, and merely 6% declared they had never bought an unnecessary product or service. Only 3% of the sample never spent more than initially planned, and half of them considered this problem as occurring ‘very often’.

The participants declared being fully aware of seller manipulations: 86% of them noticed manipulations everywhere. Still, only 14% admitted manipulation susceptibility during shopping, while almost half of the sample agreed conditionally (‘generally yes’), and 7% chose the negative answer. On the other hand, nearly 60% of the respondents declared they could give examples of manipulations by marketers/sellers aimed at consumers. The respondents most commonly offered multipacks and retail product placement as examples.

The results show that most respondents are aware of the role of emotions in purchase decisions. The same applies to the application of social influence in marketing; more than half of the respondents are aware they succumb to it. Note that emotions can be effective marketing tools, such as manipulation, when their influence is covert. Individuals with high awareness become more immune.

In summary, note that 'the behavioural perspective does not invalidate economic thought and its categories' (PIE Report, 2019, p. 42). The need to deviate from the model of the rational homo economicus is increasingly mentioned in public space in general, not only in economics or marketing. It is because of the weight of universal psychological mechanisms and their ultimate role in the decision-making of modern individuals in financial, educational, and health domains. These mechanisms can be independent of intelligence, education, or social background. This is especially true for practical areas of economic or social policy, where the human factor is more consequential than previously thought.

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