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*The Importance of Personality Psychology in the Study of Prosocial
Consumer Attitudes – Implications for Research in the Field
of Socially Responsible Marketing*

Keywords: behavioral economics; economic psychology; personality psychology; socially responsible marketing

JEL: M31; M14; D01

How to quote this paper: Rutkowska, A., & Kozłowski, W. (2023). The Importance of Personality Psychology in the Study of Prosocial Consumer Attitudes – Implications for Research in the Field of Socially Responsible Marketing. *Annales Universitatis Mariae Curie-Skłodowska, sectio H – Oeconomia*, 57(4), 161–181.

Abstract

Theoretical background: This article is based, regarding the theoretical foundations, on selected issues of behavioral economy and economic psychology, which question the classical assumptions of the *homo oeconomicus* concept and the standard approach to studying the consumers' attitudes and behaviors.

Purpose of the article: The system of individual and socially shared consumer values undergoes evolutionary changes in the modern, turbulent socio-economic reality. The thesis has been put forward that in

the post-pandemic realities, because of the re-evaluation of given values, psychological factors play an increasingly important role in shaping pro-social consumer attitudes, and the consumer's personality largely determines favorable attitudes towards socially responsible marketing initiatives. The article is conceptual in nature. It provides a theoretical background for the authors' planned empirical research. The main objective of this paper is to define the new research areas for socially responsible marketing, in which personality psychology could play a significant role in identifying consumers' pro-social attitudes.

Research methods: Given the need for an interdisciplinary approach to studying consumers' pro-social attitudes, a review was conducted of the literature on the subject concerning the behavioral economy and economic psychology, with a special emphasis on the issue of personality.

Main findings: The literature studies and observation of the socio-economic reality aimed at identifying new direction of empirical research in socially responsible marketing. Four main research areas were proposed to which the appropriate marketing types were assigned: post-COVID reality (social marketing and cause-related marketing); healthcare (social marketing); the reality of war (social marketing and cause-related marketing); ecology – green marketing). The empirical studies based on personality psychology in the areas indicated above could refer to the concept of goal-oriented behavior psychology and the Five Factor Model.

Introduction

In the post-pandemic reality characterized by digitization, computerization, personalization of the product and service offer and intensified competition, the psychological and cognitive sphere of the consumer plays an important role in the decision-making process. Given the multi-aspect lockdown consequences, including having to maintain social distance, isolation, and sometimes even alienation, the human mental condition has changed, and the need for social interactions has become manifest. Reassessing some values and redefining the conditions of consumption and social life has affected the functioning of individuals and society. The psychological effects of the pandemic, the war (particularly, the military conflict between Russia and Ukraine) and the devastation of the natural environment are increasingly often brought up in the scientific and media context.

Human behavior relating to taking actions aimed at changing social attitudes to improve the individual and social well-being, as well as purchasing “green” products and cause-related products are types of pro-social behavior, based on values associated with altruism and empathy towards social issues. Prosocial behavior is understood as any individual's voluntary and purposeful action (Eisenberg & Miller, 1987, p. 91), such as helping, comforting, sharing, protection, prevention, and cooperation, which bring social benefit to the individual, another person, or a social cause. In this context, one can assume that – given the dynamic changes in production, exchange, and consumption – an interdisciplinary study approach to the issue of social responsibility of market entities (enterprises, non-profit organizations, consumers, individuals), included in the socially responsible marketing concept (social marketing, cause-related marketing, green marketing) is fully justified. Socially responsible marketing (SRM) is marketing philosophy that a company/organization/ should take into consideration to make the world a better place. It can be defined as “consists of practices and perspectives mandated by an implicit social contract, which requires marketing policies,

actions and outcomes to adhere to a corporate (“good”) citizenship that is proactive and non-discretionary” (Laczniaak & Shultz, 2021, p. 204). Nowadays, green marketing (GM) and cause-related marketing (CRM) are the most important strategic marketing tools, which allows company to signal its corporate social responsibility (CSR) and to achieve both economic and social objectives (Amavate & Deb, 2021; Castillo-Vilar & Cavazos-Arroyo, 2020; Sharma, 2021).

Methodological assumptions of the research

This paper includes theoretical considerations on the role of personality psychology in studying consumers’ prosocial behaviors. Their main purpose is to propose the areas in which personality psychology can provide the grounds for research undertaken in the field of SRM. To implement the research objectives, four research questions were formulated:

1. What are the theoretical foundations of consumer behavior research considering the assumptions of economic psychology?
2. What is the subject of personality psychology research and what are the characteristics of different consumer personality types?
3. What are the forms of SRM in response to contemporary consumer trends?
4. What can be the directions of SRM studies?
5. What personality models can be used in the proposed research areas of socially responsible marketing?

The issues dealt with in the article are important not only from the point of view of pro-social behavior but also have practical implications in creating effective social marketing, cause-related marketing, and green marketing campaigns arising from fitting the actions to the market trends and the psychographic personalities of their targets.

A literature review was conducted with the use of Google Scholar and ResearchGate web search engines based on the following keywords: “behavioral economics”, “economic psychology”, “personality psychology”, “socially responsible marketing”. Databases were selected based on the list proposed by Booth et al. (2016, p. 113) and the arguments made by Orduna-Malea et al. (2017).

Literature review

Legitimacy of employing the theoretical assumptions of the behavioral economy and psychology economy in analyzing consumer behaviors

Consumer studies conducted in the classical economy are based on the normative approach to assess decision-making processes and are grounded on the constructivist concept of rationality. However, the observation of the contemporary,

uncertain, complex, and dynamically changing socio-economic reality undermines the previously postulated full rationality of economic entities and decision-making processes arising from the maximization of the utility function. The assumptions of the *homo oeconomicus* concept were questioned in the course of economic thinking development by studies in behavioral economy and economic psychology. Being an interdisciplinary science, behavioral economics, which combines economics and psychology, examines the impact of psychological, social, cognitive, and emotional factors on making economic decisions by individuals and institutions and their effects (Zalega, 2015, pp. 11–12). The cognitive objective of economic psychology is to study mental and affective states with respect to economic behaviors (Klimeczak, 2013, pp. 18, 21–22). To obtain reliable findings from studies which consider cognitive holism and the variability of the environment, one can talk about the need to change the scientific paradigm and redefine the concept of rationality and the need for an interdisciplinary scientific approach. This arises from the fact that people will never be fully rational as they have a natural tendency to make cognitive mistakes. The cognitive capabilities of both consumers and producers are tendentious and limited, and the existing model of subjective and expected utility does not consider the buyers' inclination to avoid risk and uncertainty.

The theoretical approach to the decision-making process, considering psychological variables is represented by prospect theory formulated by Kahneman and Tversky (1979). It assumes that people adopt a reference point when making decisions and evaluate the results as gains or losses. Theory shows a relationship between the likelihood of people making uncertain choices and the context of these decisions. Prospect theory is closely related to the framing effect, i.e. the way of mentally representing a decision-making problem (Kahneman & Tversky, 1979). The framing effect is one of the most influential psychological mechanisms on human life. Framing may be successfully used in choice architecture. For years, this behavioural tool as a conscious influence on the way reality is presented, has been commonly used in business or marketing (Czerwonka & Siembida, 2022, p. 12).

Regarding studies of consumer attitudes and behaviors, one can claim that economic and psychological theories are intertwined. Recent times have seen the development of experimental studies of behaviors and motives as well as affective, cognitive, and behavioral attitudes that accompany business activities (Schilirò, 2012). This justifies the dynamic development of economic psychology, which is a broad area of knowledge combining the theoretical and empirical achievements of psychology and economics. The research issues of economic psychology lie in the interactions between people and the economic system. Studies of market choices cover various situational variants, such as the logic of choice with the absence of uncertainty, choices in a risk situation, choices in a situation of uncertainty and choices in a situation of a lack of knowledge. Economic psychology, in turn, deals with mental mechanisms and processes that lie at the foundations of consumer and economic behaviors. This approach is applied on the grounds of economic psychol-

ogy to determine consumer attitudes and to assess individual consumer behaviors and decisions. Many researchers point to the need for taking into consideration psychological theories in an analysis of economic choices and consumer attitudes, e.g. McNeill (2023), Lim et al. (2022), Loxton et al. (2020), Concari et al. (2020). Social sciences and behavioral economics may appear as an invaluable source of knowledge that explains the irrationality of decision-makers, who led by their own emotions and analyses, often ignored the facts and actual conditions (Czerwonka & Siembida, 2022).

Given the existing limitations, the decision-making process involves considerable simplification of alternatives and only then rationalizing the decisions already taken. Expanding the limits of the theory of economics by psychological and behavioral assumptions makes it necessary to take into consideration behaviors which do not fit into the neoclassical schemes. The usability of the economic theories and their practical applications means that the existing tools are modified with a view to applying them to the observed, qualitatively different patterns of consumer behavior (Albanese, 2006, p. 3).

Subject of personality psychology research

From the point of view of economic psychology, a person's personality is one of the most significant variables which determine human behavior. Personality is a term which is difficult to define clearly, and the approach to the method of studying it depends on the adopted theoretical position. The first psychologist who provided the definition of personality was Wilhelm M. Wundt. He understood it as "the unity of feeling, thinking and wanting" (Wundt, 1886, p. 385). Personality in the psychological literature is defined as a set of constant and variable psychophysical traits associated with all the actions, experiences and needs of a person on the physiological level and a person's character, his/her intellect, and spirituality (*The Gale Encyclopedia of Psychology*, 2001). In a general approach, personality is an individual's characteristic, constant way of responding to the socio-natural environment and entering interactions with it. The concept of personality, considered *sensu largo*, includes all bio-mental conditions which determine the constancy and organization of a person's behavior and his/her ability to control him/herself. When considered *sensu stricto*, the concept of personality is referred only to those properties which decide the choice of goals and programs of actions as well as ways of a person's responding to the world (motives, attitudes, needs, beliefs), whereas those properties which determine the main skill-related or stylistic aspect of behavior (intelligence, abilities, temperament) are ignored. A person's personality is not something constant or static, but it develops throughout the person's life. The issue of personality is central to modern psychology. Personality psychology is an area of general psychology whose main object of study is the human mental structure, its development

over one's life and its association with behavior across a wide range of theoretical approaches (Reber & Reber, 2005, p. 227).

In their psychological dictionary, Reber and Reber (2005) identify six possible positions in an approach to the definition of personality: type theories, trait theories, psychoanalytical/psychodynamic theories, behaviorism with learning theory, humanism with an emphasis on self-fulfillment, theories of social learning with cognitive elements situationism, as well as interactionism as an eclectic position. The major theories of personality include (Reber & Reber, 2005, pp. 226–229):

- factor theories and trait theories which present personality as a hierarchical organization of dispositions, mental traits or individually differentiating dimensions (R.B. Cattell, H.J. Eysenck),

- constitutional theories (E. Kretschmer, W.H. Sheldon),

- organicist theories (K. Goldstein, A. Angyal),

- dynamic theories, usually psychoanalytic ones, which treat personality as a dynamic organization of mental structures and needs, partly innate and ones that someone is unaware of (S. Freud, C.G. Jung, A. Adler, E.H. Erikson),

- behavioristic social theories of learning, which treat personality as an organization of habits acquired while learning (J.B. Watson, J. Dollard),

- cognitive theories, in which personality depends on cognitive mechanisms and structures, representations of the subject (individual) and the world (G.A. Kelley).

To simplify this, the approaches to understanding personality in psychological studies can be divided into three large groups: personalism, situationism and interactionism (Jastrzębski, 2009, p. 37). A more general classification of approaches in personality psychology takes into account the “person – situation” controversy, where a person is understood as having permanent traits established in the psychophysical constitution of a person, whereas the situation denotes all the socio-environmental variables, which have an impact on given human behaviors (Jastrzębski, 2009, p. 37). In this approach, “personality is a relatively stable pattern of manifest and concealed tendencies to react, which distinguish an individual among other individuals” (Epstein, 1982, p. 91).

Despite common consent regarding a relationship between the type of personality and a person's behavior, there is variance with respect to the nature of these relations, as well as the methods of studying and assessment of the type of personality impact on the person's behavior (Gajewski, 1994, pp. 79–80; Hubert, 2010). According to Kotler, specific psychological traits which characterize a person result in logical and stable ways of responding to the environment (Kotler, 1994, p. 170). Therefore, personality refers to consumers' regular behaviors or their responses to repeated situations. It is important in the market context that personality, despite its stable structure, can undergo certain modifications caused by environmental factors and marketing stimuli. In consequence, a person's behavior can be explained by a description of his/her internal responses to external stimuli. The factors that stimulate the development of differences in consumers' individual personalities include

environmental factors and hereditary traits, resulting in differences in intelligence, abilities, and temperament.

The dominant theoretical approach in studies of personality and temperament assumes that the latter applies to the formal characteristics of one's behavior and its dynamics, whereas the former – to the contents-related aspects of behavior. Temperament is a set of a person's constant mental traits affected by genetic factors, an innate inclination, and a flair for something. The oldest theory of temperament, and one most common and still valid, is that developed by the ancient Greek physician, Hippocrates. The classification proposed by him is widely used in economic psychology although it is hardly applied in studies of pro-social consumer attitudes. Hippocrates identified four temperament types (Hippokrates, 1895, p. 195): an impulsive choleric person (domination of bile – Greek *chole*), calm phlegmatic person (domination of mucus – Greek *phlegma*), sociable sanguine person (domination of blood – Latin *sanguis*) and reflexive melancholic person (domination of black bile – Greek *melas chole*).

Hippocrates' temperament typology can be used in marketing. According to the typology presented above, typical features of the *choleric* temperament include strength, determination in pursuing one's goal, quick-temperedness, impulsiveness, impetuousness, irritability and an inclination for domination and proactivity. The strengths of people with this type of temperament include the ability to make decisions, goal orientation and broad organizational and managerial skills. Typical features of a person with a *phlegmatic* temperament include calmness, composure, ability to think analytically, orderliness, meticulousness, mental strength, peacefulness, individualism, and empathy. Contrary to what it might seem, phlegmatic people can be caring and kind, possess the ability to listen carefully, and they have a positive attitude to the surrounding reality. A person with a *sanguine* temperament is open, communicative, proactive, spontaneous, and determined to pursue their goals. They possess leadership qualities and the ability to act flexibly in different situations, as they have a generally positive attitude to changes, to novelty and do not like monotony or boredom. The characteristic features of the *melancholic* temperament include perfectionism, gentle nature, introversion, high emotional intelligence, sensitivity to beauty and low mental toughness. Melancholic people are reflexive, which is why they value being on their own and social distance. They can be acute observers of reality and often spot things invisible to others. These characteristics show that people with a melancholic temperament should exhibit the strongest pro-social attitudes. Targeting SRM campaigns at them should bring tangible benefits (Leith et al., 2009).

The contemporary personality typology according to a person's behavior was proposed by Jung. He identified the introvert and extrovert personalities (Jung, 1960, p. 159). Typical features of introverted consumers include consideration, reflection, self-analysis, and "inward" orientation, which is why their decision-making process is lengthy and preceded by extensive analysis. On the other hand, extrovert consumers are impulsive, impatient, emotional, open, and "outward" oriented. Jung also

identified four personality functions, which determine the way in which one's mind can grasp reality: 1) thinking (using one's intellect and knowledge to infer, mental operations), 2) feeling (being driven by values, subjectivism, and empathy), 3) perception (noticing links between experiences perceivable with senses and their nature), 4) intuition (ability to use signals from unconscious processes and to notice elusive links). Jung's typology identifies eight basic personality types: extrovert vs introvert, sense-driven vs intuitive, analytical vs judging (feeling) and rational vs receptive.

The typological approach is another paradigm of personality description. The system developed by Myers and Briggs – MBTI (Myers–Briggs Type Indicator) is based on Jung's mental types. The Myers–Briggs typology presents a combination of four dimensions (dichotomies), i.e. it identifies sixteen personality types (Myers, 1962, pp. 15–30):

1. ESTJ: Extraverted Sensing Thinking Judging.
2. ISTJ: Introverted Sensing Thinking Judging.
3. ENTJ: Extraverted Intuitive Thinking Judging.
4. INTJ: Introverted Intuitive Thinking Judging.
5. ESTP: Extraverted Sensing Thinking Perceiving.
6. ISTP: Introverted Sensing Thinking Perceiving.
7. ENTP: Extraverted Intuitive Thinking Perceiving.
8. INTP: Introverted Intuitive Thinking Perceiving.
9. ESFJ: Extraverted Sensing Feeling Judging.
10. ISFJ: Introverted Sensing Feeling Judging.
11. ENFJ: Extraverted Intuitive Feeling Judging.
12. INFJ: Introverted Intuitive Feeling Judging.
13. ESFP: Extraverted Sensing Feeling Perceiving.
14. ISFP: Introverted Sensing Feeling Perceiving.
15. ENFP: Extraverted Intuitive Feeling Perceiving.
16. INFP: Introverted Intuitive Feeling Perceiving.

Despite the usefulness of the MBTI questionnaire nowadays, this tool is less frequently applied in personality tests and has been replaced with the Big Five Model. The type of consumer's personality manifests itself primarily in its attitudes. An attitude is one of the key factors explaining prosocial behavior. It is a multi-dimensional construct, which refers to information, beliefs and knowledge possessed by an individual on the object of the attitude (the cognitive component of the attitude), emotions concerning the object (the affective component) and the individual's reaction to a specific object (behavioral component) (Galan-Ladero et al., 2015, p. 54). Therefore, an attitude describes what a consumer thinks and feels and how he/she reacts to a specific object. The knowledge of the consumer typology with respect to personality attributes enables one to design optimally services and to personalize products adapted to specific purchaser groups. A prosocial personality regarding economic psychology and a decision-making process should be linked to emotions, which are psychological a concept of feelings (Outley & Jenkins, 2003). The issue

of the role of emotions in decision-making processes is taken up especially based on modern neuroeconomics, neuromarketing and SRM.

A consumer's social involvement is determined by his/her sensitivity to a socially principal issue or other people's needs. A significant role regarding pro-social attitudes is played by altruism and empathy. Many studies have shown that altruistic values impact on effectiveness of social marketing (Hanks et al., 2022; Long, 2022), cause-related marketing (Fan et al., 2020; Baek et al., 2020) and green marketing (Galati et al., 2022; Bautista et al., 2020). Experiencing a specific emotional state increases the readiness and motivation to act and releases specific forms of activity, especially in the social context, such as helping others or cooperation. Outley and Jenkins (2003) analyzed emotions in social relations and identified emotions of cooperation, such as love and satisfaction, and emotions of competition, such as anger, fear, and contempt. Emotions caused by observing other people suffering are responsible for the "empathy – altruism" mechanism (Łosiak, 2007, p. 136). An experience of emotions implies a range of consequences in a further course of mental, cognitive, and motivational processes, and it changes social behaviors. Therefore, the consumer's social involvement is catalyzed by the motivational consequences of emotions. Readiness to give help can be induced by empathy towards a person in need and stimulated by emotions of sadness or grief, which confirms the "positive emotion – helping" effect. Experiencing a positive effect (emotion) increases the inner motivation to act and a tendency to give help to others, and a tendency to maintain this positive emotional state (Isen, 2005, pp. 545–546).

SRM as a practical response to consumer trends and to the need for ethical solutions

The knowledge of cognitive, emotional, and behavioral mechanisms that create the consumer's pro-social attitudes enables the optimum fitting of specific categories of products to individual areas of SRM. Referring to the tree of consumer trends developed by XTC World Innovation ([www1](http://www1.xtcworld.com)), ethics is the innovativeness axis on the social responsibility plane. In the sphere of ethics, the trend related to solidarity and ecology is the basis for distinguishing three forms of SRM. An increase in social awareness and the development of pro-social consumer attitudes is their added value.

The first approach concerns social marketing. The main emphasis in commercial marketing is placed on creating value both for the company and for consumers through the production and supply of appropriate goods and services. In contrast, according to Anker et al. (2022, p. 160), social marketing focuses on creating value by promoting socially desirable behaviors and changes. Kotler and Andreasen (1991) define social marketing as "differing from other areas of marketing only with respect to the objectives of the marketer and his or her organization. Social marketing seeks to influence social behaviors not to benefit the marketer, but to benefit the target

audience and the general society”. One example of social marketing is the campaign entitled “PrEP4Love”. It was launched in 2016 on the US market, and its aim was to propagate an effective but underused method of preventing HIV transmission within high-risk groups called “Pre-exposure prophylaxis” (Keene et al., 2021). Another example is a social campaign of the “Veganuary” non-profit organization, which encouraged people around the world to try a vegan diet (Diaz et al., 2021).

The second approach concerns green consumerism and is referred to as “green marketing” (GM). The rapid development of green marketing arises from the fact that – given the dwindling natural resources, global warming and increasing pollution of the atmosphere and the natural environment – consumers pay special attention to organic products to reduce the impact of the environment on health issues (Nekmahmud & Fekete-Farkas, 2020, p. 2). GM is used in promotional activities of firms which describe themselves as environment friendly. Examples of GM include offering organic food to customers, e.g. by Organic Farma Zdrowie and Symbio Polska S.A. (*11 Top Organic...*, n.d.) or the sale of products in biodegradable packaging (*Biodegradowalne opakowania żywności...*, n.d.).

The third pro-social marketing approach is a response to the dichotomic perception of the goal and social responsibility of the company. This refers to solidary and altruistic actions and is referred to as cause related-marketing (CRM), also known as charity-motivated marketing and marketing associated with charitable activities. CRM is a kind of attempt to reconcile philanthropic (altruistic, ethical) and the egoistically business-related vision of a company operation (nature of the company management objectives). It is a commercial activity based on rational giving motivated by profit, focused on the idea of joint help to the noble cause, concluded between business, charity organizations and consumers. Usually, the amount of funds for supporting a specific social cause arises from the scale of purchase of products and services covered by the campaign. Starbucks can be used as an example of a CRM campaign. In 2008, Starbucks donated 50 cents from the sale of each exclusive RED Starbucks beverage to the Global Fund to Fight AIDS, Tuberculosis and Malaria (Ferraris et al., 2020).

In the context of SRM, personal values are significantly associated to prosocial behavior. Although they have been extensively studied to examine consumer behavior in many product categories, their impact on effectiveness of socially responsible marketing remains under investigated. In cause-related marketing and social marketing studies prosocial behavior are blended with altruism (Baek et al., 2020; Esposti & Pavone, 2019). Green marketing studies show that barriers to purchasing green products constitute lack of environmental knowledge, high price, perceived associated risks, organizational image, trust, and willingness to pay (Sharma, 2021).

Various theories have been developed and used to explain and predict prosocial behavior in the context of socially responsible marketing. Table 1 presents marketing and consumer theories. The most frequently used theory is:

- in cause-related marketing studies: attribution theory, persuasion theory, as-
sociative learning theory, the theory of planned/reasoned action, and self-construal
theory in CRM studies (Thomas et al., 2020),
- in social marketing studies: social marketing transtheoretical model of change,
the theory of planed behavior, social cognitive theory, and the information-motiva-
tion-behavioral-skill (Davis et al., 2015),
- in green marketing studies: theory of planed action and theory of reasonable
action (Yaday & Pathak, 2017).

Table 1. Examples of theories applied to SRM

Green Marketing	Cause-Related Marketing	Social Marketing
<ul style="list-style-type: none"> – value-based theory – theory of reasonable action – prosocial behavior & social judgment theory – rationale choice theory – theories of emotion – hedonic theories – theory of planned behavior – social network theory 	<ul style="list-style-type: none"> – associate learning theory – human value theory – Schwartz value theory – social identity theory – personal relevance theory – theory of reasonable action – signaling theory – persuasion theory 	<ul style="list-style-type: none"> – social identity theory – theory of planned behavior/reasoned action – value belief norm theory – change theory – control theory – social change theory – theory of interpersonal behaviour

Source: (Groening et al., 2018, pp. 1848–1866; Davis et al., 2015, pp. 323–344; Thomas et al., 2020, pp. 488–516).

Research directions in the field of SRM

The knowledge of the consumer’s psychology and considering it with respect to the post-pandemic socio-economic factors and the current tense geopolitical situation can contribute to an increase in the consumer’s social involvement in conducting common good-oriented initiatives. Personality characteristics can be used as the basis for the optimum modelling of the social product attributes adequate to the current market situation. The knowledge of personality psychology can also be the foundation for social ideas with a high marketing potential concerning issues with a high social awareness level, regarded as significant and important. These are high-potential ideas as they attract public attention. Given the modern problems, which redefine the conditions of socio-economic life, with respect to the value systems, the authors of this paper propose four research areas which combine personality psychology with socially responsible marketing: post-COVID reality, healthcare, the reality of war and environmental protection (Table 2).

The first of the proposed study areas is the post-COVID reality, understood as the transformations in the axiological-sociological sphere of the consumer in the post-pandemic society. Considering the experience of the COVID-19 pandemic, one should assess the way in which consumers perceive the new market reality. The long-term pandemic effects contributed to the revaluation of some values – both individual and social – hence, determination of the consumer’s new hierarchy of

values becomes the main research problem. It is values that play the leading role in creating human needs and desires and in taking specific market actions.

Table 2. Proposed research areas in SRM, considering personality psychology

		Research areas			
		Post-COVID reality	Healthcare	Reality of war	Environment protection
Subject of study	Post-COVID hierarchy of values	Health-related effects of the COVID-19 pandemic	Countries of Eastern Europe	Eco economy	
	Post-COVID mental condition	Cancer prevention	Countries of Western Europe	Circular economy	
	Sensitivity to social issues	Preventing diseases of affluence	International community	Eco products	
Type of marketing in the subject of study	Social Marketing / Cause-related marketing	Social Marketing	Social Marketing / Cause-related marketing	Green Marketing	

Source: Authors' own study.

The axiological issues are fundamental issues related to decision-making, including making purchase choices. One should try at an in-depth effect assessment for lockdowns, a range of troublesome restrictions, prohibitions and orders, and sanctions which have an impact on the present, post-COVID mental condition of the consumer and his/her behavior. This raises the question of whether the post-COVID consumer has become less or more sensitive to social needs, given the fact that the circumstances forced the consumer to care about one's own health. Therefore, one should determine how the consumer perceives the "new" world and the market reality and should identify attitudes towards pro-social initiatives. Therefore, there is another question: DO the frequently traumatic, borderline existential experiences during the pandemic result in the transformation of attitudes from hedonistic to altruistic and *vice versa*? The answers to these questions are important for a person's inclination for active participation in social marketing and cause-related marketing campaigns.

The second group of research is related to *individual and public healthcare*. It should be an area of special attention in social marketing. The healthcare issue in Poland is currently important because of the two-year restrictions on public access to medical facilities and the need for social isolation. The effects of this period are negative. The number of new patients – mainly with cancers and cardiovascular diseases – is seen to grow rapidly (*Warsaw Course on Cardiovascular ...*, 2023; *Raport Niewydolność serca w Polsce 2014–2021*, 2023; *Narodowa Strategia Onkologiczna na lata 2020–2030*, 2023). Therefore, one can put four main research questions related to Polish health care system:

1. Do consumers show higher sensitivity (care) about their own health and health prophylaxis?
2. Does greater care about health prophylaxis imply pro-social attitudes towards post-COVID prophylaxis of affluence diseases and cancers?
3. Does an individual experience of COVID-19 affect a consumer's greater willingness to support a campaign for health prophylaxis of affluence diseases and cancers?
4. Do the pro-social attitudes towards health prophylaxis, which eliminates the negative consequences of COVID-19, have a significant impact on consumers' willingness to pay for private medical services and diagnostic examinations?

One can assume considering these questions that a positive attitude towards healthcare social marketing initiatives will arise not only from altruism and empathy but also from one's own experiences, i.e. a consumer's health and psychosomatic condition.

The third research area concerns the war in Ukraine, both in the local and global context. Given the international scale of war repercussions and sanctions, geopolitical situation, economic geography, and cultural factors, one can judge the response and sensitivity of residents of Eastern and Western European countries and the international community to social causes. Then, it is of key importance to be able to identify the extent of social solidarity, openness to other people's suffering, altruism and empathy of various consumer groups identified based on the personality criterion.

It is also worth reflecting on consumers' attitude and favor towards charitable behavior when it is necessary to limit consumer spending. Therefore, it is justified to ask whether current altruists will still be willing to purchase products through which financial support will be provided to socially important causes and to pay a higher price for such products, even when the economic conditions deteriorate and the level of the disposable income is reduced, or will they exhibit hedonistic and materialist inclinations. It becomes important in this context to identify the direction, strength, and effect of a change in households' material situation on behavioral pro-social attitudes. This can be expressed in the question: Will a consumer, who is, in fact, poorer, still make purchasing decisions in accordance with the present hierarchy of values, or will his/her attitude to social issues change?

The fourth research area covers the issues associated with ecology, which provide the foundation for green marketing. The research in this aspect aims at assessing the impact of ecological awareness on the attitudes and purchasing decisions of various social groups, with reference to the personality typology and the generational cohort theory (Inglehart, 2015), the decreasing purchasing power of the currency. Assessing how consumers perceive new ecological trends, circularity, sharing economy, and the credibility of corporate pro-environmental activities is crucial to building a strong brand image. It is important to try to understand consumer perceptions in these areas. One should assume that Generation Z has a more enthusiastic attitude towards green marketing than the older generations. According to personality char-

acteristics, people with a melancholic temperament should demonstrate the highest inclination for purchasing products that support environmental protection, while choleric individuals will not tend to purchase or support pro-ecological initiatives.

Proposed methods for research on pro-social attitudes in the context of SRM

Since the research in these areas should employ the interdisciplinary and holistic analytic approach, their main objective is to identify the key economic and psychological determinants of consumers' present behavior. Therefore, it is necessary to refer to the assumptions of personality psychology to conduct analyses, both *ex post* and *ex ante*. The methodological assumptions of the studies in the proposed thematic areas could consider McDougall's (1972) concept of goal-oriented behavior and the personality model called McCrae and Costa's (2017) Big Five. They are applied in marketing-economic studies to a small extent, which creates new cognitive opportunities.

McDougall states that while becoming a scientific study of behavior psychology must cope with the concept of intention, i.e. goal-oriented actions (Gasiul, 2020, p. 26). Such actions, also known as transgressive behaviors (Kozielecki, 2004, p. 20; Kwiatkowska et al., 2017, p. 16) are understood as the ability to exceed one's achievements and capabilities. The mechanisms of taking such actions are linked to motivational and cognitive factors. Goal-oriented actions enable a consumer to formulate social goals. Goals mediate in the choice of a consumer behavior strategy while at the same time determining the strength of motivation to act in a given way. The assumptions of goal-oriented behavior psychology, combined with teleology based on philosophical considerations, can provide the foundations for an analysis of consumers' motivations and attitudes towards socially responsible marketing.

The key role in the psychology of intentional behaviors is played by aspirations. According to McDougall, the main motives of goal-oriented behavior include those that are natural and innate, whereas the others arise from individual experience. Instincts are also important. Components of an instinct include a psychophysical predisposition to perceive stimuli, emotions, and a disposition to act in a specific manner. Instincts are the foundation of the whole motivational life, and their absence results in the body's inability to take any activity. Therefore, creating the desired instincts oriented towards a common good, as is the case with social marketing, charity-motivated marketing, and green marketing, can be a catalyst for pro-social changes and behaviors (McDougall, 1972).

Instinct and specific goals activate emotions. A person would not take any actions if it was not for a combination of instinct and emotions. It is worth analyzing in the context of goal-oriented behavior psychology how a consumer will behave under the influence of emotions and, additionally, sentiments, i.e. complex feelings. These observations can be particularly valuable in the aspect of creating favorable attitudes towards socially responsible marketing. Sentiments are complex instinctive

tendencies and individual tendencies to experience certain emotions and desires with respect to a certain object and result from experiences associated with the object. The complexity of a sentiment manifests itself on the thought and behavior organization level, leading to their self-contradiction. When a person experiences such a contradiction of thoughts, actions, and feelings towards an object for which the person has some sentiments, the person can feel ashamed at the same time. According to McDougall, such states are effects of a sentiment described as self-respect, which is the central, integrating and best-organized force in the personality. It is this sentiment and its inner coherence that is regarded as essential for understanding individual behaviors in many personality theories.

McDougall stresses that human behavior is motivated by sentiments, which have their source in instincts, which, in turn, are based on emotions. One’s behavior is not driven by pure rationalism but rather by emotions. This context makes two questions justifiable from the research perspective. First, to what extent is the modern consumer susceptible to rational and to what extent – to emotional factors? Second, do individual types of personality significantly determine the perception of the message conveyed by socially responsible marketing and the tendency to support socially responsible initiatives?

The psychological personality model called the Five Factor Model (FFM) is particularly useful in economic studies, including socially responsible marketing. The key personality dimensions upon which all its characteristics are founded include neuroticity, extroversion, openness to experience, a tendency to compromise and diligence (Table 3) (Gasiul, 2020, pp. 146–149).

Table 3. The McCrae and Costa Big Five model

Component	Ingredients	Description
I. Neuroticity	Anxiety	tendency to react with tension and fear, nervousness, and tendency to worry
	Aggression/hostility	tendency to experience anger and irritation, not necessarily expressed outwards
	Depressiveness	tendency to experience the feeling of guilt, sadness, helplessness, loneliness
	Impulsiveness	inability to control desires and drives
	Hypersensitivity	susceptibility to stress, a tendency to react with a sense of helplessness and panic in tricky situations
	Excessive self-criticism	social anxiety, low self-esteem, a feeling of embarrassment in the presence of others
II. Extroversion	Sociability	scope and number of contacts with others
	Cordiality	ability to establish close relations with others
	Assertiveness	tendency to dominate and to be the leader
	Activity	tempo, vigour, the need to be involved
	Looking for experiences	seeking excitement and stimulation
	Emotionality with respect to positive emotions	tendency to react with positive emotions and good spirits, cheerfulness, and optimism

Component	Ingredients	Description
III. Openness to experience	Imagination	fantasy and creative imagination
	Aesthetics	aesthetic sensitivity, interest in art
	Feelings	openness to other people's emotional states
	Actions	seeking new stimuli actively
	Ideas	intellectual curiosity, philosophical interest
IV. Tendency to compromise	Values	readiness to analyse social, political, and religious values, the opposite of dogmatism
	Trust	a conviction that others have good intentions vs scepticism and cynicism and a conviction that others may be dishonest and dangerous
	Straightforwardness	ingenuousness, frankness, and social naivety vs tendency to manipulate others
	Altruism	tendency to focus on the needs of others vs egocentrism
	Pliancy	the way of responding to interpersonal crises, controlling aggressiveness, pliancy and calmness and a tendency to forgive and forget vs aggressiveness and an inclination for rivalry
V. Diligence	Modesty	realistic attitude to oneself, no tendency to be biased in favour of oneself vs a conviction about one's superiority and narcissistic tendencies
	Tendency to get sappy	Showing kindness and friendliness to others, supporting charity organisations and actions vs rationality and terseness, and low sensitivity to social needs and those related to the standard of living
	Competences	conviction about being able to cope in life vs conviction about the lack of skills and the inability to cope with tasks
	Tendency to keep things tidy	orderliness, meticulousness, neatness vs lack of methodical approach and order in life and actions
	Reliability	being driven strictly by one's rules vs unreliability and indolence
	Striving for accomplishment	a prominent level of aspiration and strong motivation for success in life, a high level of commitment to work, a certain tendency to workaholism vs lack of ambition, clear goals in life and indolence
V. Diligence	Self-discipline	capability for self-motivation to complete tasks that were started, even if they are not attractive vs a tendency to abandon tasks before they are completed
	Prudence	a tendency to deliberate a problem carefully before deciding and starting an action vs impulsiveness in decision-making, spontaneity, and the ability to make quick decisions if it is necessary

Source: Author's own study based on (Gasiul, 2020, pp. 146–149).

The Big Five model consists of central personality components, i.e. the fundamental tendencies (five basic personality traits and all the cognitive abilities, talents, and mental properties of a subject), characteristic adaptations (personal desires, attitudes, interests, beliefs, habits, acquired as a result of interactions with the surrounding) and self-image (self-schemas, personal myths). Characteristic adaptations take place through the acquisition of such ways of feeling or behavior, which – in a sense – are coherent with one's personality traits and previously acquired adapta-

tion patterns. Apart from the central components, there are peripheral ones, which are external relative to one's personality, although intricately linked to it. These components include biological foundations and external influences (so-called "inputs") and the objective biography (the course of life, actions taken during life, and accumulated records of what a person does and what he/she experiences) (McCrae & Costa, 2005, pp. 220–243).

Big Five Personality traits can be a valuable frame to understand prosocial behavior (Trishala, 2021). Although, this theory is validated by numerous studies in the personality literature as a predictor of human behaviour (Ratnawat & Borgave, 2019) it is used to a small extent in cause-related marketing research (e.g. Patel et al., 2017). The Big Five model is also not widely used in social marketing. It is used mainly in the context of the influence of social media (e.g. Bunker & Kwan, 2021; Azucar et al., 2018; Liu & Campbell, 2017). In contrast, it is attracting more and more attention from researchers involved in pro-environmental attitudes and behaviors traits (e.g. Souter et al., 2020). The components mentioned in the model can significantly differentiate consumers' attitudes towards social marketing, cause-related marketing, and green marketing. In-depth identification of the personality traits which affect pro-social attitudes can contribute to the better fitting of the marketing messages and to the higher effectiveness of socially responsible initiatives.

Conclusions

Customers' behaviour on the market is the result of many economic and non-economic determinants, which stem from environmental conditions and relate to the internal conditions of the consumer as an individual (Angowski et al., 2017). All the social, political, and economic changes of the present time, caused by the pandemic repercussions, the war and progressing degradation of the natural environment, should induce a change in the research approach to the assessment of the factors affecting the consumers' market behaviors. A holistic approach to an individual in the social and market context and in-depth identification of the consequences of the transformations in the field of consumption requires an interdisciplinary scientific approach, combining achievements of various scientific disciplines.

Considering the proposed thematic areas, i.e. post-COVID reality, healthcare and the reality of war and ecology, one can assume that considering the issues related to personality psychology in studies of social marketing, cause-related marketing, and green marketing will considerably expand the scope of knowledge of consumers and their market behaviors. When referring the theory of goal-oriented behavior psychology to the proposed areas, one should determine the role of sentiment, instinct, and emotions in taking pro-social actions by an individual. Applying the Big Five model in reference to socially responsible marketing can be useful in assessing a relationship between the consumer's personality traits and his/her goal-oriented behavior and

personality type, on the one hand, and a positive attitude to social initiatives, on the other. Moreover, this model can be particularly useful in identifying the method of a person's adaptation to new social-market conditions listed in individual thematic areas of research.

To sum up, we think, that psychological factors play an increasingly vital role in shaping consumers' pro-social attitudes, and the consumer's personality determines the positive attitudes towards socially responsible marketing initiatives.

References

- 11 Top Organic Food Startups and Companies in Poland*. (n.d.). Retrieved from <https://beststartup.eu/11-top-organic-food-startups-and-companies-in-poland>
- Albanese, P. (2006). Behavioral economics and consumer behavior. In M. Altman (Eds.), *Handbook of Contemporary Behavioural Economics: Foundations and Developments*. Routledge.
- Amawate, V., & Deb, M. (2021). Antecedents and consequences of consumer skepticism toward cause-related marketing: Gender as moderator and attitude as mediator. *Journal of Marketing Communications*, 27(1), 31–52. doi:10.1080/13527266.2019.1630663
- Angowski, M., Domańska, K., & Komor, A. (2017). The impact of promotional measures on the buying behaviour of young consumers on the food market. *Annales Universitatis Mariae Curie-Skłodowska, sectio H – Oeconomia*, 51(2). doi:10.17951/h.2017.51.2.9
- Anker, T.B., Gordon, R., & Zainuddin, N. (2022). Consumer-dominant social marketing: A definition and explication. *European Journal of Marketing*, 56(1), 159–183. doi:10.1108/EJM-08-2020-0618
- Azucar, D., Marengo, D., & Settanni, M. (2018). Predicting the Big 5 personality traits from digital footprints on social media: A meta-analysis. *Personality and Individual Differences*, 124, 150–159. doi:10.1016/j.paid.2017.12.018
- Baek, W.Y., Song, H.S., Kim, D.H., & Byon, K.K. (2020). Cause-related marketing and purchase intention toward team-licensed products: Moderating effects of sport consumers' altruism. *Sustainability*, 12(8), 31–83. doi: 10.3390/su12083183
- Bautista, R., Dui, R., Jeong, L.S., & Paredes, M.P. (2020). Does altruism affect purchase intent of green products? A moderated mediation analysis. *Asia-Pacific Social Science Review*, 20(1), 159–170.
- Biodegradowalne opakowania żywności rozwiązaniem, które może wydłużyć czas jej przydatności do spożycia*. (n.d.). Retrieved from <https://cordis.europa.eu/article/id/421413>
- Booth, A., Sutton, A., & Papaioannou, D. (2016). *Systematic Approaches to a Successful Literature Review* (2nd ed.). London: SAGE. Retrieved from: net/publication/235930866_Systematic_Approaches_to_a_Successful_Literature_Review
- Bunker, C.J., & Kwan, V.S.Y. (2021). Do the offline and social media Big Five have the same dimensional structure, mean levels, and predictive validity of social media outcomes? *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 15(4), Article 8. doi:10.5817/CP2021-4-8
- Castillo-Villar, F.R., & Cavazos-Arroyo, J. (2020). Social representations of “rounding up” as a cause-related marketing practice: A study of Mexican millennials. *Sustainability*, 12(13), 5278. doi:10.3390/su1213527
- Concari, A., Kok, G., & Martens, P. (2020). A systematic literature review of concepts and factors related to pro-environmental consumer behaviour in relation to waste management through an interdisciplinary approach. *Sustainability*, 12(11), 44–52. doi:0.3390/su12114452
- Czerwonka, M., & Siembida, J. (2022). Usage of behavioural innovation in the context of the COVID-19 crisis. *Annales Universitatis Mariae Curie-Skłodowska, sectio H – Oeconomia*, 56(3), 7–17. doi:10.17951/h.2022.56.3.7-17

- Davis, R., Campbell, R., Hildon, Z., Hobbs, L., & Michie, S. (2015). Theories of behaviour and behaviour change across the social and behavioural sciences: A scoping review. *Health Psychology Review*, 9(3), 323–344. doi:10.1080/17437199.2014.941722
- Esposti, S., & Pavone, V. (2019). Oocyte provision as a (quasi) social market: Insights from Spain. *Social Science & Medicine*, 234, 112381. doi:10.1016/j.socscimed.2019.112381
- Díaz, E.M., Lado, N., & Martín, D.F. (2021). An original social marketing campaign to “try vegan”: effectiveness and impact on quality of life. *Applied Social Marketing and Quality of Life: Case Studies from an International Perspective*, 205–219. doi:10.1007/978-3-030-83286-5_27
- Eisenberg, N., & Miller, P.A. (1987). The relation of empathy to prosocial and related behaviors. *Psychological Bulletin*, 101(1), 91. doi:10.1037/0033-2909.101.1.91
- Epstein, S. (1982). A research paradigm for the study of personality and emotions. In M. Page, R.A. Dienstbier (Eds.), *Nebraska Symposium on Motivation Personality – Current Theory and Research*. London: Lincoln.
- Fan, X., Deng, N., Qian, Y., & Dong, X. (2020). Factors affecting the effectiveness of cause-related marketing: A meta-analysis. *Journal of Business Ethics*, 175, 339–360. doi:10.1007/s10551-020-04639-6
- Ferraris, A., Giudice, M.D., Grandhi, B., & Cillo, V. (2020). Refining the relation between cause-related marketing and consumers purchase intentions: A cross-country analysis. *International Marketing Review*, 37(4), 651–669. Retrieved from www.emeraldinsight.com/0265-1335.htm
- Gajewski, S. (1994). *Zachowanie się konsumenta a współczesny marketing*. Łódź: Wyd. UŁ.
- Galan-Ladero, M.M., Galera-Casquet, C., & Singh, J. (2015). Understanding factors influencing consumer attitudes toward cause-related marketing. *International Journal of Nonprofit and Voluntary Sector Marketing*, 20, 52–70. doi:10.1002/nvsm.1517
- Galati, A., Miret-Pastor, L., Siggia, D., Crescimanno, M., & Fiore, M. (2022). Determinants affecting consumers’ attention to fish eco-labels in purchase decisions: a cross-country study. *British Food Journal*, 124(10), 2993–3013. Retrieved from <https://www.emerald.com/insight/0007-070X.htm>
- Gasiul, H. (2020). *Psychologia osobowości. Nurty. Teorie. Koncepcje*. Warszawa: Difin.
- Groening, C., Sarkis, J., & Zhu, Q. (2018). Green marketing consumer-level theory review: A compendium of applied theories and further research directions. *Journal of Cleaner Production*, 172, 1848–1866. doi:10.1016/j.jclepro.2017.12.002
- Hanks, L., Line, N., Dogru, T., & Lu, L. (2022). Saving local restaurants: The impact of altruism, self-enhancement, and affiliation on restaurant customers’ EWOM behavior. *Journal of Hospitality & Tourism Research*. doi:10.1177/10963480221092704
- Hippokrates. (1895). *Sämtliche Werke. I Bd.*, München: H. Lüneburg Verlag.
- Hubert, M. (2010). Does neuroeconomics give new impetus to economic and consumer research. *Journal of Economic Psychology*, 31(5), 812–817. doi:10.1016/j.joep.2010.03.009
- Inglehart, R. (2015). *The Silent Revolution: Changing Values and Political Styles among Western Publics*. New Jersey: Princeton University Press, Princeton.
- Isen A.M. (2005). Pozytywny afekt a podejmowanie decyzji. In M. Lewis & J.M. Haviland-Jones (Eds.). *Psychologia emocji* (pp. 527–545). Gdańsk: GWP.
- Jastrzębski, A.K. (2009). Osoba a osobowość. Psychologiczne koncepcje osobowości w świetle klasycznej antropologii filozoficznej. *Roczniki Filozoficzne*, 1, 29–48. Retrieved from <http://www.jstor.org/stable/43408830>
- Jung, C.G. (1960). *Psychologische Typen*. Zürich: Rascher Verlag.
- Kahnemann, D., & Tversky, A. (1979). Prospect theory: An analysis of decisions under risk. *Econometrica*, 47(2), 263–291. doi:10.2307/1914185
- Keene, L.C., Dehlin, J.M., Pickett, J., Berringer, K.R., Little, I., Tsang, A., & Schneider, J.A. (2021). #PrEP4Love: Success and stigma following release of the first sex-positive PrEP public health campaign. *Culture, Health & Sexuality*, 23(3), 397–413. doi:10.1080/13691058.2020.1715482
- Klimczak, B. (2013). Relacje między ekonomią a psychologią. *Ekonomia*, 25, 13–23.
- Kotler, P. (1994). *Marketing. Analiza, planowanie, wdrażanie i kontrola*. Warszawa: Wyd. Gebethner i S-ka.

- Kotler, P., & Andreasen, A. (1991). *Strategic Marketing for Nonprofit Organizations* (4th ed.). Englewood Cliffs: Prentice-Hall.
- Kozielecki, J. (2004). *Spoleczeństwo transgresyjne. Szansa i ryzyko*. Warszawa: Wyd. Akademickie „Żak”.
- Kwiatkowska, K., Kwiatkowska, M.M., & Markowicz, P. (2017). Zachowania transgresyjne a uwarunkowania osobowościowe. *Kwartalnik Naukowy*, 2(30), 17–37. Retrieved from <https://fidesratio.com.pl/ojs/index.php/FetR/article/view/673>
- Lacznik, G., & Shultz, C. (2021). Towards a doctrine of socially responsible marketing (SRM): A macro and normative-ethical perspective. *Journal of Macromarketing*, 41(2), 201–231. doi:10.1177/0276146720963682
- Leith, D., Parker, D.C., & Pickering, S.R. (2009). 4968. Acta Apostolorum 10-12, 15-17. *The Oxyrhynchus Papyri*, 74, 1–45. doi:10.1163/15685365-12341571
- Lim, W., Kumar, S., Pandey, N., Verma, D., & Kumar D. (2022). Evolution and trends in consumer behaviour: Insights from *Journal of Consumer Behaviour*. *Journal of Consumer Behaviour*, 22, 217–232. doi:10.1002/cb.2118
- Liu, D., & Campbell, W.K. (2017). The Big Five personality traits, Big Two metatraits and social media: A meta-analysis. *Journal of Research in Personality*, 70, 229–240. doi:10.1016/j.jrp.2017.08.004
- Long, M.C. (2022). Altruism and the statistical value of human life for policy and regulation. *Social Indicators Research*, 160(1), 341–355. doi:10.1007/s11205-021-02784-7
- Loxton, M., Trusket, R., Scarf, B., Sindone, L., Baldry, G., & Zhao, Y. (2020). Consumer behaviour during crises: Preliminary research on how coronavirus has manifested consumer panic buying, herd mentality, changing discretionary spending and the role of the media in influencing behaviour. *Journal of Risk Financial Management*, 13, 166. doi:10.3390/jrfm13080166
- Łosiak W. (2007). *Psychologia emocji*. Warszawa: WAiP.
- McCrae, R.R., & Costa, P.T. (2005). *Osobowość dorosłego człowieka. Perspektywa teorii pięcioczynnikowej*. Kraków: Wyd. WAM.
- McCrae, R.R., & Costa, P.T. (2017). The five-factor model across cultures. In A.T. Church (Ed.), *The Praeger Handbook of Personality across Culture* (Vol. 1, pp. 47–71). Praeger. doi:10.1007/978-1-4615-0763-5_2
- McDougall, W. (1972). Theories of action. In E.P. Hollander & R.G. Hunt (Eds.), *Classic Contributions to Social Psychology*. New York: Oxford University Press.
- McNeill, D. (2023). Can economics help to understand, and change, consumption behaviour? In A. Hansen & K. Nielsen (Eds.), *Consumption, Sustainability and Everyday Life* (pp. 317–337). Springer. doi:10.1007/978-3-031-11069-6_12
- Myers, I.B. (1962). *The Myers-Briggs Type Indicator. Manual. Educational Testing Service*. Princeton: Consulting Psychologists Press. doi:10.1037/14404-000
- Narodowa Strategia Onkologiczna na lata 2020–2030. (2023). European Cancer Inequalities Registry. Retrieved from <https://www.onkonet.pl/pdfs/Krajowe%20profile%20dotycz%20C4%85ce%20nowotwor%C3%B3w%20Polska%202023.pdf>
- Nekmahmud, M., & Fekete-Farkas, M. (2020). Why not green marketing? Determinates of consumers' intention to green purchase decision in a new developing nation. *Sustainability*, 12(19), 7880. doi:10.3390/su12197880
- Orduna-Malea, E., Martín-Martín, A., & Delgado López-Cózar, E. (2017). Google Scholar and the gray literature: A reply to Bonato's review. *EC3 Working Papers*, 27. doi:10.48550/arXiv.1702.03991
- Outley, L., & Jenkins, J.M. (2003). *Zrozumieć emocje*. Warszawa: PWN.
- Patel, J.D., Gadhavi, D.D., & Yhukla, Y.S. (2017). Consumers' responses to cause related marketing: moderating influence of cause involvement and skepticism on attitude and purchase intention. *International Review on Public and Nonprofit Marketing*, 14(1), 1–18. Retrieved from <https://link.springer.com/article/10.1007/s12208-016-0151-1>
- Ratnawat, R.G., & Borgave, S.A. (2019). Impact of big-five personality on impulsive buying behaviour. *International Journal of Multidisciplinary*, 4(6), 500–505.

- Raport Niewydolność serca w Polsce, 2014–2021*. (2023). Asocjacja Niewydolności Serca Polskiego Towarzystwa Kardiologicznego. Retrieved from https://www.niewydolnosc-serca.pl/doc/ANS_raport_01.09_.pdf
- Reber, A.S., & Reber, E.S. (2005). *Słownik Psychologii. The Penguin Dictionary of Psychology*. Warszawa: Wyd. Nauk. Scholar.
- Schilirò, D. (2012). Bounded rationality and perfect rationality: psychology into economics. *Theoretical and Practical Research in Economic Fields (TPREF)*, 3(06), 99–108. Retrieved from <https://journals.aserspublishing.eu/tpref/article/view/1171>
- Sharma, A.P. (2021). Consumers' purchase behavior and green marketing: A synthesis, review and agenda. *International Journal of Consumer Studies*, 45, 1217–1238. doi:10.1111/ijcs.12722
- Soutter, A.R.B., Bates, T.C., & Möttus, R. (2020). Big Five and HEXACO personality traits, proenvironmental attitudes, and behaviors: A meta-analysis. *Perspectives on Psychological Science*, 15(4), 913–941. doi:10.1177/1745691620903019
- The Gale Encyclopedia of Psychology* (2nd ed.). (2001). Gale Group.
- Thomas S., Kureshi S., & Vatavwala S. (2020). Cause-related marketing research (1988–2016): An academic review and classification. *Journal of Nonprofit & Public Sector Marketing*, 32(5), 488–516. doi:10.1080/10495142.2019.1606757
- Trishala, M. (2021). Big Five Personality traits as determinants of pro-social behaviour. *Indian Journal of Positive Psychology*, 12(2), 200–203.
- Warsaw Course on Cardiovascular Interventions (WCCI), czyli WCCI 2023: Co Polakom leży na sercu?* Retrieved from <https://www.rp.pl/diagnostyka-i-terapię/art38447551-co-polakom-lezy-na-sercu-czyli-wcci-2023>
- Wundt, W.M. (1886). *Ethik: eine untersuchung der tatsachen und gesetze des sittlichen lebens*. Stuttgart: Enke.
- Yadav, R., & Pathak, G.S. (2017). Determinants of consumers' green purchase behavior in a developing nation: Applying and extending the theory of planned behavior. *Ecological Economics*, 134(C), 114–122. doi:10.1016/j.ecolecon.2016.12.019
- Zalega, T. (2015). Ekonomia behawioralna jako nowy nurt ekonomii – zarys problematyki. *Studia i Materiały*, 1(18), 7–25. doi:10.7172/1733-9758.2015.18.1
- www1: <http://www.xtcworldinnovation.com/default.asp?id=19>