

ensuring their availability and quality;

- to create conditions to attract to mass sports disabled and disadvantaged citizens and members of their families;
- to promote veteran movement in the field of physical culture and sports;
- to create conditions for the development of children's sports: all children should learn the main elements of certain sports to review the values of sport and to detect predisposition to further studies;
- to provide organic relationship between physical education, mass sports and higher achievements sports.

To improve this problem, the strategy of development of physical culture indicated that people should be attracted to a healthy lifestyle, physical training and sports, to harden, to participate actively in community activities there are outlined specific ways to attract the population to systematic physical training. The main ideas of the strategy development of physical culture are highlighted in the target complex program "Physical Education - Health of the Nation", which thoroughly examines the problems of physical culture of the country and solutions. Problem of formulation and implementation of the strategy development of physical training is very relevant for research

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## APPLYING BEHAVIORAL ECONOMICS TO UNDERSTAND HOUSEHOLD ENERGY USE

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Introduction. Household energy conservation is considered now as a major challenge and opportunity for scientific researchers, practitioners and policymakers [1]. But despite of high levels of awareness and concern about climate change the

general public is not responding sufficiently to calls to mitigate climate change. For climate adaptation the situation is still very problematic [2]. Consumers seem to be gaining greater awareness of the value and need for sustainable energy practices, particularly amid growing public concerns over greenhouse gas emissions and climate change. But yet even with adequate knowledge of how to save energy and a professed desire to do so, many consumers still fail to take noticeable steps towards energy efficiency and conservation. personal values or material interests of consumers [1; 2]. This justifies the that understanding these phenomena can make household and community responses to public policy interventions more predictable and can help to encourage renewable and sustainable energy use among consumers.

**Objectives.** The premise of this article is to illuminate the key cognitive biases and motivational factors that can enhance the effectiveness of public policy in energy conservation.

**Results.** Consumer behaviour is complex and rarely follows traditional economic theories of decision-making. Traditional economic theory postulates that human decision-making and behaviour are based on purely rational choice [1 – 8]. But a growing body of scientific research demonstrates that people are rarely the rational decision-makers envisaged by traditional economic models of human behaviour. Empirical evidence from psychology and behavioural economics justifies that consumer choices and actions often deviate systematically from neoclassical economic assumptions of rationality, and there are certain fundamental and persistent biases in human decision-making that regularly produce behaviour that these assumptions cannot account [2; 5 – 7].

Some of these cognitive biases and behavioural anomalies are particularly relevant to understanding energy consumption, especially in terms of predicting and changing the behaviour of individuals and households. Among the most powerful and pervasive biases to influence consumers' patterns of energy usage include the status quo bias, loss and risk aversion, sunk-cost effects, temporal and spatial discounting, and the availability bias. Psychological phenomena such as normative social influence, intrinsic and extrinsic rewards, and trust may also play a key role [1; 6].

According to the common definition the term householder refers to adults who own or rent housing and who, separately or jointly, make choices or decisions on behalf of themselves and any other members of their household [2].

It is reasonable to note that these key insights from behavioural economics and psychology can lead the effective design and implementation of consumer-focused strategies and public policy interventions to improve residential energy conservation, particularly solutions that capitalise on message framing, choice architecture and incentivisation to shift human behaviour [1]. The results of analysis allow to provide some examples of these implications and opportunities, with an emphasis on identifying practical, cost-effective and mass-scalable solutions to encourage more renewable and sustainable energy use among consumers.

Status quo bias and defaults refers to the fact, that the effectiveness of behavioural interventions can be enhanced by directly targeting such practices related to energy that can quickly and easily be modified using default settings. For example,

encourage householders to perform one-off actions such as setting a dishwasher or washing machine's default program to «short-cycle» or to «cold water» [1; 2; 7].

Satisficing aspect refers to the fact, that since people rely on increasingly simple heuristics in the face of complexity and uncertainty, different simplification strategies can help reduce cognitive overload and facilitate more effective decision-making on energy consumption. Among them there are: making a desired action easier, quicker and more convenient, minimising the physical and psychological demands needed to perform the action and reducing perceived uncertainty [1; 2]. Unnecessary complexity and sensory overload should be avoided by framing messages in a clear, concise and comprehensible format. In terms of relaying information to consumers, keeping things short and simple is essential for effective communication.

Loss aversion allows to substantiate that framing of energy-saving messages should be based on avoiding or minimising prospective costs and losses, as this may make the information more salient, memorable and motivating. Rather than only emphasising the payoffs of saving energy, focus on the costs associated with energy-wasting practices, and highlight how energy conservation activities and pro-environmental behaviour will prevent future losses and costs. Loss-framed messages often have a greater behavioural impact than gain-framed messages, particularly when a self-referencing frame is used and losses for the current generation are emphasised [1; 6; 7].

Risk aversion allows to substantiate that focus on the low-risk of energy-saving practices and investments that are safe, stable and secure, particularly where energy-efficiency technology is new, expensive, or not yet mainstream. Uncertainty around electricity supply, market prices, government policies and long-term financial payoffs make investing in energy-saving products and services seem like a risky decision for many consumers, so marketing and communication to alleviate these perceived risks may increase energy-efficient action [1; 6].

Sunk costs refers to the fact, that it is essential to reduce the salience of any large costs that consumers have already outlaid for old energy-inefficient items they are reluctant to discard, upgrade or replace, such as incandescent light bulbs or obsolete electrical appliances.

Temporal and spatial discounting refers to the fact, that the costs of investing in energy-efficiency measures are often immediate and large, whereas the benefits are delayed and gradually accrue over time, one should draw attention to the longer-term payoffs of energy conservation when framing customer-focused messages.

Normative social influence refers to the fact, that frame energy-saving practices as both common and socially desirable. For example, advising consumers that people similar to them are using less energy or taking certain energy-saving actions, in addition to conveying social approval of such actions, will likely motivate them to conform to these positive «energy saving» norms and reduce their consumption accordingly [1 – 3].

Free-riding and social loafing refers to the fact, that creating a shared group identity where people can feel their individual contribution is important, and

emphasising that many other consumers are also actively saving energy, may help reduce free-riding and social loafing in group settings. Making any shared outcomes or collective achievements more salient, and publicly acknowledging the efforts of individuals, may also help motivate people to contribute to the greater good [1].

Conclusions. Thus it should be noted that, there is also vast scope to enhance the conceptual frameworks and empirical measurement of key behavioural economic principles as they are applied to energy policy. There is a growing call among researchers for a consistent framework that synthesises these behavioural anomalies, alongside greater reliance on empirical research and impact evaluation, more studies with large-scale interventions, and further research on the durability of effects. From a theoretical standpoint, researchers should aim to develop simple yet general models that explain a large portion of the psychological phenomena we have cited herein, including the additive and interactive effects of different cognitive biases. Some critics of behavioural economics.

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## **ANALYSIS OF THE TARGET AUDIENCE OF END USERS AS A STAKEHOLDER IN THE DEVELOPMENT AND INTEGRATION OF THE INNOVATIVE TIEX SYSTEM WITH THE CLUSTER ANALYSIS METHOD**

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Analysis of the market of transport services has shown that in the situation we have, the population is increasingly changing personal transport for urban passenger transport. Preservation of the social, economic and political stability of the city largely depends on the efficiency of the passenger transport complex.