



STEREOTYPES IN THINKING, STEREOTYPING, AND ERRORS IN DECISION-MAKING (FOR EXAMPLE, THE OPTIMISM BIAS OR CONFIRMATION BIAS).

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Abstract.

This article provides a scientific and theoretical analysis of stereotypes formed in the process of thinking, stereotyping mechanisms, and their impact on human decision-making. Along with the importance of stereotypes as a tool of cognitive economy, their negative aspects leading to an incorrect assessment of reality are also highlighted. The essence of cognitive errors that occur in the decision-making process, including the optimism error, confirmation bias, availability heuristics, and other thinking deviations, is also revealed. The study analyzes the consequences of stereotyping and cognitive errors in personal, social, and professional activities, and considers psychological and methodological methods for reducing them. The results show that understanding stereotypes and cognitive deviations is important in developing critical thinking and improving the quality of decision-making.

Keywords. thinking, stereotype, stereotyping, cognitive processes, cognitive errors, decision making, optimism bias, confirmation bias, heuristics, critical thinking, social cognition, psychology, cognitive psychology, rational decisions.

Аннотация

В данной статье представлен научно-теоретический анализ стереотипов, формирующихся в процессе мышления, механизмов стереотипизации и их влияния на принятие решений человеком. Наряду с важностью стереотипов как инструмента когнитивной экономики, также освещаются их негативные аспекты, ведущие к неверной оценке реальности. Раскрывается сущность когнитивных ошибок, возникающих в процессе принятия решений, включая ошибку оптимизма, предвзятость подтверждения, эвристику доступности и другие отклонения в мышлении. В исследовании анализируются последствия стереотипизации и когнитивных ошибок в личной, социальной и профессиональной деятельности, а также рассматриваются психологические и методологические методы их уменьшения. Результаты показывают, что понимание стереотипов и когнитивных отклонений важно для развития критического мышления и повышения качества принятия решений.

Ключевые слова. мышление, стереотип, стереотипизация, когнитивные процессы, когнитивные ошибки, принятие решений, предвзятость оптимизма, предвзятость подтверждения, эвристика, критическое мышление, социальное познание, психология, когнитивная психология, рациональные решения.

Introduction

Human thinking is a complex cognitive system that involves the processes of receiving, processing and interpreting information from the external environment. However, due to the limited capabilities of a person to process information, he often perceives reality through simplified schemes and generalized representations. This process is called stereotyping.

Stereotypes are stable and generalized ideas about certain social groups, phenomena or events, which have a significant impact on the process of human perception and decision-making[1]. Research in the field of cognitive psychology shows that although stereotypes allow for rapid processing of information, they often lead to misinterpretation of reality[2]. Especially in situations of uncertainty or time constraints, people tend to use heuristic thinking methods. Although heuristics are mental strategies that simplify decision-making, they can lead to various cognitive errors[3]. One of the most common cognitive errors encountered in the decision making process is the optimism bias. This phenomenon is characterized by people overestimating future positive outcomes and underestimating the likelihood of negative outcomes[4]. Confirmation bias is also widespread, in which a person seeks out and pays more attention to information that confirms their previous views and beliefs, and tends to deny contradictory evidence.

In today's globalization and digital information space, the influence of stereotypes and cognitive errors is becoming even stronger. The large amount of information distributed through social networks and the media places an additional burden on people's critical thinking abilities. As a result, cognitive biases such as stereotyping and confirmation bias are becoming an important factor not only in personal life, but also in education, management, economics, and political decision making processes.

Methodology

This study is aimed at studying stereotypes in thinking, the process of stereotyping, and cognitive errors in decision-making, using a comparative analytical, systematic approach, and methods of content analysis of scientific literature. The theoretical and methodological basis of the study is the scientific views of foreign and domestic scientists on cognitive psychology, social psychology, and the theory of thinking. The cultural historical theory of Lev Vygotsky, a representative of the Russian school of psychology, is of important methodological importance in the study of stereotyping and cognitive processes. The scientist emphasizes that human thinking and perception develop under the influence of social experience and cultural means formed in society. In his opinion, a person's perceptions of reality are formed through the social environment, and these factors also play an important role in the emergence of stereotypes[5]. Russian psychologist Sergei Rubinstein interprets thinking as a process inextricably linked with activity. He notes that human cognitive activity is not a passive reflection of external influences, but the result of active processing. According to Rubinstein, stereotypes are formed based on a person's previous experience and influence subsequent decision-making[6]. English scientist Richard Wiseman, studying the mechanisms of optimism and subjective assessment in human thinking, emphasizes that people often tend to perceive reality more positively than it actually is. This creates the basis for the formation of the optimism error and increases the likelihood of errors in the decision-making process[7].

Uzbek psychologist E.G. G'oziyev describes thinking as the highest cognitive process of the human mind. According to the scientist, the ideas and generalizations formed in the process of thinking can sometimes manifest themselves in the form of stereotypes and interfere with objective assessment[8]. Also, Uzbek psychologist M.G. Davletshin, studying the issues of thinking and personality psychology, shows that previous experience, social environment, and



individual psychological characteristics play an important role in human decision-making. According to his views, stereotyping and incorrect generalizations directly affect a person's assessment of a particular situation[9]. This study analyzes the essence of stereotyping and cognitive errors based on the theoretical views of the above scientists, and evaluates their impact on the decision-making process based on a comparative and systematic approach.

Discussion

The issue of stereotypes and cognitive errors in thinking is one of the important research areas of modern psychology and cognitive science. Research results show that stereotypes are manifested as a cognitive mechanism that helps a person quickly process information about the environment. However, excessive intensification of the stereotyping process leads to a distortion of objective assessments, simplified and sometimes incorrect interpretations of reality. Especially in social relations, stereotypes reinforce pre-formed ideas about individuals and groups and prevent an objective analysis of new information[1]. The analysis shows that stereotyping and confirmation bias are closely related phenomena. A person usually tends to accept information that is consistent with his previous knowledge, views and beliefs. As a result, contradictory information is not adequately evaluated or is completely rejected. This leads to an increase in bias in the decision-making process. For example, a manager's initial negative opinion of an employee may persist in assessing the results of subsequent activities. In this case, stereotypes and confirmation bias work together to lead to poor management decisions[10].

The study also found that the optimism bias also has a significant impact on the decision-making process. The optimism bias is characterized by a person's overly positive assessment of future events and insufficient consideration of possible risks. This condition can lead to many mistakes in planning business projects, making financial decisions, and in personal life. Studies show that most people assess their chances of success as high and their chances of failure as low. As a result, planning errors, inefficient use of resources, and unexpected problems arise[3].

Stereotypes and cognitive biases are also becoming more complex in a modern society with advanced information technologies. Social networks and Internet platforms often offer users information that is consistent with their existing views. This leads to the emergence of the phenomenon of an "information bubble" or "echo chamber", which further strengthens the confirmation bias. As a result, people's ability to get acquainted with alternative points of view is limited and stereotypical thinking is strengthened. The results of the discussion show that it is difficult to completely eliminate stereotyping and cognitive errors. Because they are formed as natural features of human thinking. However, their negative impact can be reduced. To do this, it is important to develop critical thinking skills, consider alternative options in the decision-making process, use an evidence-based approach, and conduct a comparative analysis of information from different sources. In particular, the formation of knowledge about cognitive errors and stereotypes in the education system serves to develop a person's ability to think independently and objectively. Thus, stereotypes, stereotyping, and cognitive errors in decision-making are psychological factors that affect all areas of human activity. Their in-depth study is important not only theoretically, but also practically, and serves to increase the effectiveness of management, education, economics, and social relations.

Results

As a result of studying stereotypes in thinking, the process of stereotyping, and cognitive errors in decision-making, it was found that these phenomena have a significant impact on human cognitive activity and practical decisions. The theoretical sources analyzed during the study showed that stereotypes are formed in human thinking as a means of rapid information processing. However, it was found that the regular use of this mechanism can in some cases lead to an incorrect assessment of reality and a limitation of objective thinking. An analysis of the studied scientific literature showed that stereotypes are formed mainly under the influence of social experience, cultural environment, upbringing, and individual life experience of a person. Stereotypes are manifested as a simplified model of information received by a person and serve as a ready-made scheme for evaluating new information. As a result, a person tends to interpret a particular event or phenomenon based on existing stereotypes. This in some cases leads to the emergence of incorrect generalizations and conclusions[1]. The study found a close relationship between the stereotyping process and confirmation bias. Confirmation bias is characterized by a person paying more attention to information that confirms their views and beliefs, and denying or underestimating information that contradicts them. The results of the analysis of theoretical sources showed that the presence of stereotyping serves to strengthen the confirmation bias. Because a person tends to maintain the initial opinion formed through the stereotype and evaluates new information from this perspective. As a result, the objectivity of the decision-making process decreases and the likelihood of errors increases.

The results of the study confirmed that the optimism bias also has a significant impact on the decision-making process. The analyzed scientific works noted that most people imagine their future more positively, assess the probability of success higher, and the probability of risk and failure lower. This situation can occur both in a person's daily activities and in their professional activities. In particular, it was found that the optimism bias in planning business projects, making investment decisions, organizing education and professional activities can lead to misallocation of resources and failure of plans to produce the expected results in practice[3]. The results showed that stereotypes and cognitive errors are a natural product of human thinking. The human brain uses heuristic methods due to the need to process large amounts of information in a short time. Although heuristics are effective in many situations, in some cases they cause systematic errors. In particular, stereotyping, confirmation bias and optimism bias are the main factors limiting a person's ability to make objective decisions. It was also observed that the impact of these cognitive errors is increasing in the conditions of a modern information society. Algorithmic sorting of information on social networks, online publications and digital platforms is causing people to increasingly clash with information that reinforces their existing views. This leads to an increase in the confirmation bias and further stabilization of stereotypes. As a result, people may have difficulty accepting alternative points of view.

According to the results of the study, the development of critical thinking skills is important in reducing the negative consequences of stereotyping and cognitive errors. Comparative analysis of information from different sources before making a decision, studying alternative views, using an evidence-based approach, and controlling the influence of personal beliefs on decisions can significantly reduce the negative impact of stereotyping. Therefore, the

formation of critical thinking competencies in the educational system and in professional activities is one of the urgent tasks. In general, the results of the study confirmed that stereotypes and cognitive errors have a direct impact on the decision-making process. Despite the fact that they are natural mechanisms of human thinking, they can cause incorrect decisions. Therefore, an in-depth study of these phenomena and the development of scientific and practical recommendations aimed at reducing their negative impact is one of the important tasks of psychology today.

Conclusion

This study analyzed the psychological nature and interrelationship of stereotypes in thinking, the process of stereotyping, and cognitive errors in decision-making. Based on the studied theoretical sources and scientific views, it was found that stereotypes are an integral part of human thinking, they serve to simplify the process of processing and evaluating information. At the same time, it was substantiated that excessive stereotyping can hinder the objective perception of reality, limit the scope of human thinking, and lead to erroneous conclusions. The results of the study showed that the stereotyping process is formed on the basis of a person's social experience, cultural environment, upbringing, and personal life observations. Stereotypes create a certain level of cognitive convenience and allow for a quick assessment of complex situations. However, they often lead to an assessment of events and individuals based on generalized criteria. As a result, a person interprets new information from the perspective of existing views, and this further strengthens stereotypes. The analysis showed that stereotyping creates the basis for the emergence of certain cognitive errors in decision-making. In particular, the confirmation bias reflects a person's tendency to seek and accept information that supports their views. In such a situation, a person does not sufficiently analyze opposing evidence or seeks to deny it. As a result, the objectivity of the decision-making process decreases and the likelihood of errors increases. In this regard, it was found that there is a strong psychological connection between stereotyping and the confirmation bias.

It was also found that the optimism bias is one of the factors that significantly affects the decision-making process. People often tend to overestimate their capabilities and future success. This leads to insufficient consideration of possible risks and problems. As a result, planning shortcomings, financial or organizational errors, and unexpected negative consequences may occur. The study found that the optimism bias affects not only individual decisions, but also collective and management decisions.

In the conditions of a modern information society, the influence of stereotypes and cognitive errors is becoming increasingly strong. The large amount of information disseminated through information technologies and social networks can serve to reinforce people's existing views. As a result, stereotyping, confirmation bias, and other cognitive biases are manifested on a wider scale. This further increases the need to develop critical thinking skills and form a culture of independent analysis of information. Based on the results of the study, it was concluded that the complete elimination of stereotypes and cognitive errors is a difficult process in practice, since they are formed as one of the natural mechanisms of human thinking. However, their negative consequences can be reduced. For this, it is important to develop critical thinking, study alternative points of view, use an evidence-based approach to

decision-making, as well as regularly revise one's own thoughts and views. In general, stereotypes, stereotyping, and cognitive errors in decision-making are complex psychological phenomena that occur in all areas of human activity. Their in-depth study is of great scientific and practical importance not only for the development of cognitive psychology, but also for increasing the effectiveness of education, management, economics, and social relations. Future research in this area will help identify modern forms of stereotyping, the impact of the digital environment on cognitive processes, and effective methods for improving the quality of decision-making.

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