

THE ROLE OF CHESS IN THE DEVELOPMENT OF YOUTH'S THINKING AND INTELLECTUAL DEVELOPMENT

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АННОТАЦИЯ:

In this article theoretically highlighted the role of chess in the development of youth thinking and intellect. Analyzed the potential of chess to develop logical and critical thinking, concentration, memory, strategic planning, and decision-making skills. The game also considers the importance of assessing problematic situations, comparing alternative solutions, and anticipating the consequences of actions. The pedagogical possibilities of chess training and its role in developing patience, independent thinking and discussed responsible decision-making in young people. The article interprets the purposeful and systematic application of chess to the educational process as a means of supporting the intellectual activity of young people.

Introduction. One of the important tasks of modern education is to develop young people's skills of independent thinking, analyzing problem situations, and making informed decisions. In the context of the growing flow of information, the ability to assimilate knowledge, as well as to sort, interconnect, and apply it in practical situations, is of particular importance. In this regard, it is relevant to study the pedagogical potential of intellectual activities that encourage young people to think actively. Chess is one such activity, where each move requires assessing the situation, comparing alternatives, and considering the likely consequences.

In the game of chess, the participant determines his goal in relation to the plan and capabilities of the opponent. He comes to a certain decision, analyzing the location of the grains, their interaction, defense and offensive capabilities. For example, the opportunity to capture a piece does not always mean a profitable move: the player must also consider

whether the safety of his king or the protection of his other pieces weakened after such a move. This process requires seeing the big picture of the situation, not just a single result, and balancing short-term gains with long-term goals.

Research methodology. This article uses psychoanalytic, descriptive-analytical, artistic-analytical, contextual analysis, hermeneutic analysis, psychological analysis, and textual analysis methods.

Results and Discussion. The possibilities of chess in the development of youth thinking are associated with its game structure. Each situation on the chessboard requires the player to analyze the existing conditions, distinguish important characters, compare several walks, and pre-evaluate the consequences of the chosen action. In this case, the young chess player does not limit himself to repeating a ready-made answer, but seeks a solution that is appropriate to the situation. Therefore, the pedagogical value of chess training can be explained by the specific thinking operations performed during the game. "G. Sala and F. Gobet studied the effects of chess education on academic and cognitive skills through a meta-analysis. The authors noted that the reviewed studies had methodological limitations and cautioned against interpreting positive results as a direct effect of chess. [1] First of all, chess creates a favorable environment for practicing logical thinking. The player strives to determine the cause-and-effect relationship between one move and the next situation. For example, moving a protected piece to another square may leave the previously protected piece vulnerable to attack by the opponent. Therefore, when evaluating a move, not only the new position of the piece being moved is considered, but also its previous function. Such analysis encourages young people to see events in their interrelatedness and to distinguish between the direct and indirect consequences of a decision: "A. P. A meta-analysis by Burgoyne and colleagues found a positive correlation between chess skill and logical reasoning, short-term memory, knowledge, and information processing speed. "This relationship was stronger in younger and less skilled chess players". [2].

Logical thinking is also manifested in the calculation of combinations in chess. The player asks "if I do this walk, how does the opponent respond?", considering several possible sequels. For example, in a situation where a knight attacks both the king and the rook at the same time, the opponent must first remove his king from danger. Then the attacking knight can take the rook. However, to determine the correctness of such a combination, it is also necessary to check whether the horse can be taken by the opponent or whether the attack can be defeated in another way. This process involves the steps of making an assumption, testing it, and drawing a conclusion based on it. Chess also allows you to practice critical thinking. Critical thinking means not accepting one's decision as unquestionably correct, but rather examining its foundations, identifying its weaknesses, and evaluating alternative solutions. In chess, a seemingly attractive move is not always the best move. For example, capturing an opponent's pawn may give a material advantage, but if the king's defense is weakened as a result of this move, its overall value should be re-

evaluated. In such a situation, the reader might ask, "What do I gain "along with the question "What opportunity will I miss? Will also learn to put the question.

It is useful to suggest multiple candidate walks for a situation in a lesson and compare them based on evidence. Students may be asked to justify their walks with specific reasons, not with a general statement like "This is a good walk." For example, explanations such as "This move controls the squares in the center, "This move ensures the safety of the king," or "This move eliminates the opponent's threat" reveal the rationale behind the decision. In such a structured lesson, expressing an opinion and supporting it are connected. Creative thinking in chess seen in finding an unusual but appropriate solution from the available options. A player can sometimes strengthen an attack by sacrificing a strong piece or disrupt an opponent's plan with an unexpected defensive move. However, creativity does not mean taking a random walk.

An unusual idea is only effective if it is based on precise calculations and an assessment of the situation. In this respect, creative and logical thinking in chess complement each other: the former suggests a new option, while the latter checks its correctness. "W. G. Chase and H. A. Simon's study found that the advantage of experienced chess players in remembering meaningful game situations was explained by the perception of the arrangement of pieces as interconnected groups. This situation demonstrates the importance of domain-specific knowledge and experience in memory performance in chess[3].

In chess training, attention management is of particular importance. The player simultaneously observes the location of their grains, the opponent's threats, royal security, and walking opportunities. In this, it is not enough to consider all the characters equally important; it is necessary to distinguish the most relevant threat in the situation. For example, a student may be obsessed with continuing his or her attack, ignoring the possibility of an opponent putting a mot on a walk. Analyzing this mistake shows what happens when attention is focused on only one goal. Therefore, it is possible to form the habit of a short check before each walk during initial training.

The player first checks the safety of his king, the threat posed by the opponent's last move, and the unprotected pieces. Then he considers moves that fit his plan. This procedure can help reduce haste during the game. Its effectiveness depends on the age, training, and regular use of the student.

The function of memory in chess is also multifaceted. The reader will remember the rules of walking the grains, tactical methods, principles of debut and situations that were previously encountered. Meaningful learning, however, is not limited to memorizing sequences of walks.

For example, a student who understands the principles of fighting for the center, developing pieces, and securing the king in the opening will try to use this knowledge even in unfamiliar situations. Therefore, in chess education, it is important to combine memorization with understanding. In chess, strategic planning is manifested by

subordinating short-term actions to an overall goal. A player, in addition to evaluating the benefits of a particular move, also plans a series of moves. For example, before placing a rook on an open vertical, it may be necessary to exchange pawns on that file or bring other pieces to favorable squares.

As a result, the final goal is achieved through several preparatory actions. This process encourages young people to divide the task into stages and realize the position of each stage in the overall outcome. "G. Sala, J. P. Foley and F. Gobet emphasize the need to use an active control group when examining the educational effectiveness of chess training. Such a group helps to separate the effects specific to chess from the general effects associated with participation in additional activities"[4]. Flexibility is also necessary along with planning. An unexpected move by the opponent may require a change in the initial plan. In such a situation, the player must reassess the new situation without becoming overly attached to the previous decision. Chess allows you to practice the balance between pursuing a goal and adapting to circumstances. Both maintaining a plan and abandoning it should be decisions based on the situation.

In the intellectual activity of young people, the observation and evaluation of their own thinking process, that is, metacognitive skills, also plays an important role. In chess, such skills are practiced through post-party analysis. The student identifies the situation in which they made a wrong decision, what opportunity they missed, and what caused the mistake.

Conclusion. Chess has important pedagogical potential for training young people to think logically and critically, analyze situations, compare alternative solutions, and make informed decisions. During the game, a preliminary calculation of the outcome of actions, awareness of the opponent's plan and adaptation of his own strategy to the situation requires active thinking. Party analysis, on the other hand, allows readers to identify the causes of their mistakes and evaluate their own thinking process. The educational value of chess depends on the purposeful and systematic organization of training. Assignments that are appropriate for the age and background of the students, selected walks that supported by evidence, discussion of alternatives, and working on mistakes should be key components of the lesson. This approach can support independent thinking, patience, and responsible decision-making.

At the same time, it is not correct to directly equate achievements in chess with general intellectual development or success in other disciplines. The migration of chess-specific skills to other activities requires separate empirical investigation. Therefore, it is advisable to use chess as a complementary educational tool to support the intellectual development of young people, and to evaluate its effectiveness based on specific criteria.

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