PSYCHOLOGICAL MECHANISMS OF YOUNG PEOPLE'S PSYCHOLOGICAL WELL-BEING AND PERSONAL SELF-REGULATION IN THE CONTEXT OF INTERACTION WITH ARTIFICIAL INTELLIGENCE

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Abstract. The thesis examines the psychological mechanisms through which interaction with artificial intelligence (AI) affects the psychological well-being and personal self-regulation of young people. Four bivalent mechanisms are identified: cognitive offloading, transformation of basic psychological needs, emotional co-regulation and reflexive calibration of trust. It is argued that AI may either scaffold or substitute the young person's own regulatory resources, and that this determines its effect on well-being.

Keywords: artificial intelligence, youth, psychological well-being, self-regulation, autonomy, cognitive offloading, trust in AI.

Relevance. In recent years, artificial intelligence has moved from the periphery of technological development to the centre of everyday social practice. For today's adolescents and young adults, interaction with AI is a routine element of the social situation of development. Youth is the period in which the key structures of self-regulation — goal setting, planning, self-monitoring, emotional control and autonomous choice — are consolidated; J. J. Arnett described it as "emerging adulthood", marked by identity exploration and a gradual shift of responsibility from external regulators to the person (Arnett, 2000). It is precisely at this stage that AI enters the regulatory loop, suggesting what to read, how to formulate a thought and even how to cope with negative emotions.

Research on digital technologies and well-being has produced mixed results. Large-scale analyses show that the average effect is very small and depends on the type and context of use (Orben & Przybylski, 2019). The aim of this thesis is to identify the psychological mechanisms linking interaction with AI to young people's well-being and self-regulation and to outline an integrative model for empirical verification.

Theoretical framework. The study draws on C. D. Ryff's multidimensional model of psychological well-being, which includes self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life and personal growth (Ryff, 1989), and on self-determination theory, according to which well-being depends on the satisfaction of the needs for autonomy, competence and relatedness (Ryan & Deci, 2000). Self-regulation is considered in line with A. Bandura's social-cognitive theory, where self-efficacy is the central mechanism of agency (Bandura, 1991) and B. J. Zimmerman's cyclical model of forethought, performance and self-reflection (Zimmerman, 2000). Research on cognitive offloading (Risko & Gilbert, 2016) and on automation bias (Parasuraman & Manzey, 2010) provides the basis for analysing how people delegate effort to intelligent systems.

Main results. Theoretical analysis made it possible to identify four interrelated mechanisms, each of which is bivalent: depending on the mode of use and the person's regulatory resources, it may act either as a scaffold for development or as a substitute that weakens internal regulation.

The first mechanism is cognitive offloading and delegation of regulatory functions. Moderate and conscious delegation of information search, structuring and error checking to AI frees resources for

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creative and critical thinking and supports the experience of competence. However, when AI habitually performs the very stages that constitute self-regulation — goal formulation, planning and evaluation of results — the young person loses the practice through which these skills develop. The consequence may be reduced self-efficacy and regulatory dependence, i.e. helplessness when AI support is unavailable.

The second mechanism is the transformation of basic psychological needs. AI may support autonomy by expanding choice, yet recommendation algorithms shape preferences implicitly, creating an illusion of autonomy while the locus of control shifts to the system. Competence is strengthened when AI provides explanatory feedback, but undermined when results are obtained without one's own effort.

The third mechanism is emotional co-regulation. Emotional self-regulation develops through co-regulation with significant others, which is gradually internalised. Always available and non-judgemental AI agents can perform a similar function. Yet when AI becomes the main source of emotional support, there is a risk of parasocial attachment and avoidance of live emotional contact.

The fourth mechanism is reflexive calibration of trust. Effective use of AI requires continuous evaluation of the reliability of its outputs. Over-trust leads to automation bias and uncritical acceptance of recommendations, while under-trust leads to rejection of useful support (Glikson & Woolley, 2020). We therefore consider trust calibration a moderator that determines whether the other three mechanisms operate in the scaffolding or the substituting mode.

Integrative model. The effect of AI on psychological well-being is mediated by the state of the young person's self-regulation system and moderated by trust calibration. Thus, the decisive factor is not the amount of AI use but the quality of the regulatory relationship: who sets the goal, who evaluates the result and who bears responsibility for the decision. In Uzbekistan, strong family and mahalla ties may serve as protective factors, providing real relatedness and external co-regulation alongside the rapid digitalisation of education.

Conclusion. Interaction with AI is a new factor in the development of young people's personality whose influence on well-being is not unidirectional. AI strengthens well-being when it remains an instrument subordinated to the person's own goals, and threatens it when it displaces the internal functions of goal setting, evaluation and emotional regulation. Practical implications include training programmes for "AI-assisted self-regulation" (setting goals independently before using AI, critically evaluating its outputs, reflecting on one's own contribution), designing learning tasks in which AI serves as a tool for feedback rather than a substitute for learning, and developing AI systems that support user autonomy. Empirical verification of the model on samples of young people aged 16–25 is a promising direction for further research.

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