



DEVELOP SELF-REGULATION OF STUDENTS DURING THEIR STUDIES IN HIGHER EDUCATION INSTITUTIONS THROUGH A PRAXIOLOGICAL APPROACH

DESARROLLAR LA AUTOREGULACIÓN DE LOS ESTUDIANTES DURANTE SUS ESTUDIOS EN LAS INSTITUCIONES DE ENSEÑANZA SUPERIOR MEDIANTE UN ENFOQUE PRAXIOLÓGICO

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ABSTRACT

The study deals with the topical issue of developing self-regulation of students of higher educational institutions (HEIs) in the context of modern destruction. The aim of the study was to identify the features of developing students' self-regulation during their studies in HEIs through a praxeological approach. The study employed the following methods: psychological diagnostic methods, quantitative and qualitative data analysis, modelling. It was found that students are characterized by high levels of external and introjected regulation, while demonstrating low indicators of their own motivation and the Relative Autonomy Index (RAI). Increased indicators of affective regulation, avoidance of self-reflection, emotional awareness, and mental equivalence were revealed. A model of developing students' self-regulation in higher educational institutions through a praxeological approach was developed. It consists of target, content, procedural, reflective evaluative components, and provides for motivational, organizational activity, and reflective corrective stages. The results of the study can be used in the educational process of HEIs to develop or adjust students' self-regulation. The prospect of further research is the testing of the developed model and recommendations in HEIs.

Keywords:

Institutions of Higher learning; University students; Praxeology; Learning processes; Self-control.

RESUMEN

El estudio aborda la cuestión del desarrollo de la autorregulación de los estudiantes de las instituciones de educación superior (IES) en el contexto de la destrucción moderna. El objetivo del estudio era identificar las características del desarrollo de la autorregulación de los estudiantes durante sus estudios en IES a través de un enfoque praxeológico. El estudio empleó los siguientes métodos: métodos de diagnóstico psicológico, análisis de datos cuantitativos y cualitativos, modelización.

Se encontró que los estudiantes se caracterizan por altos niveles de regulación externa e introyectada, mientras que demuestran bajos indicadores de su propia motivación y el Índice de Autonomía Relativa (IAR). Se detectaron mayores indicadores de regulación afectiva, evitación de autorreflexión, conciencia emocional y equivalencia mental. Se desarrolló un modelo de desarrollo de la autorregulación de los estudiantes en las instituciones de enseñanza superior a través de un enfoque praxeológico.



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Consta de objetivos, contenidos, procedimientos, componentes evaluativos reflexivos y prevé etapas correctivas motivacionales, organizativas y reflexivas. Los resultados del estudio pueden utilizarse en el proceso educativo de las IES para desarrollar o ajustar la autorregulación de los estudiantes. La perspectiva de nuevas investigaciones es la prueba del modelo desarrollado y las recomendaciones en las EES.

Palabras clave:

Instituciones de Enseñanza Superior, Estudiantes Universitarios, Praxeología, Procesos de Aprendizaje, Autocontrol.

INTRODUCTION

Self-regulation of an individual is an important factor in organizing students' productive educational activities. Self-regulation is also the basis for students' independent mastery of knowledge, skills, and abilities. Of course, the students' ability to self-regulate their behaviour becomes a prerequisite for their successful professional activity and even building a professional career. It is worth noting that today Ukrainian higher school students are forced to study in wartime. This is a challenge for self-regulation of an individual. This phenomenon is directly correlated with the psycho-emotional characteristics of an individual. Wartime forces students to study in the face of instability, stress, threats to life and health. The administration, academic and teaching staff are forced to constantly change in such conditions, combine different formats and approaches to learning. This is necessary to fulfil the curriculum, realize the content of education and at the same time guarantee a safe educational environment for modern students. This emphasizes the need to find pedagogical approaches that ensure the targeted development of students' self-regulation. One of such approaches is praxeological, which is focused on the effective organization of activity and its conscious improvement. Taking into account the principles of praxeology will allow stimulating the development of students' self-regulatory skills and abilities. This requires a comprehensive study of methodological principles, pedagogical conditions and means that will contribute to the development of students' self-regulation. This is possible through the organization of educational activities focused on effectiveness, self-analysis, and continuous improvement.

Research hypothesis: higher school students have low self-regulation indicators. The novelty of the research is the development of a model for integrating the praxeological approach into the educational process of HEIs in order to develop students' self-regulation. The aim of the research is to reveal the features of the development of

students' self-regulation during their studies at HEIs using the praxeological approach. Research objectives:

- select diagnostic tools to determine the levels of student self-regulation and conduct diagnostics of the level of their self-regulation;
- develop a model for integrating the praxeological approach into the educational process of HEIs in order to develop students' self-regulation;
- provide recommendations for the implementation of the praxeological approach for the development of self-regulation in higher school students.

Researchers paid attention to the development of students' self-regulation. The concept of self-regulation is defined as the ability of an individual to consciously manage his or her own behaviour. This concept includes planning, organizing and transforming individual actions and deeds in accordance with current needs, dominant motives, significant life goals, and value orientation of the subject. A separate type of self-regulation is self-regulation of educational activities. This is the student's ability to independently adapt their educational actions to changing conditions or complications, involving thinking mechanisms for further development of the task or solving the problem (Hryniova & Kononova, 2021). However, this ability requires additional study because of the negative impacts on the development of self-regulation of Ukrainian students. For the last three years they have been living in chronic stress, uncertainty, and threats. In some studies, learning self-regulation is nominated as academic, which enables students to effectively manage their cognitive activity and is a direct correlate of academic success (Lyashenko & Belyaeva, 2024).

The main aspects of considering self-regulation of an individual are social, psychological, pedagogical. Researchers note the positive influence of students' creativity, activity, strong-willed qualities, reflective skills (self-control, self-esteem) on the development of students' self-regulation (Stryzhak, 2021). In the context of our study, the psychological and pedagogical aspect of considering self-regulation deserves special attention. It is important to establish effective pedagogical approaches to the development of self-regulation of an individual as a psychophenomenon.

The following components are distinguished in the structure of self-regulation: the purpose of the activity, the model of significant conditions, the programme of actions, the assessment of results, control, and their correction (Makarenko et al., 2023). Methods for developing students' self-regulation include practical activities, in particular, the completion of various types of practices by students in accordance with their majors (Senovska & Pryshliak, 2020). Therefore, it is important to study the process of students' self-regulation when involving them in various forms of

educational activities. The researchers also point out the importance of developing self-regulation as the ability to independently control and independently correct one's thoughts or actions for representatives of certain professions. Considerable attention is paid to studying the factors that influence the development of students' self-regulation (Payan-Carreira et al., 2022). The leading role is assigned to psychological factors for the development of students' self-regulation skills (Susanto et al., 2024). The relationship between self-regulation and cognitive styles of students' personalities is also indicated (Furman et al., 2020). It is worth noting that the insufficient development of students' self-regulation that is one of the problems of implementing blended and distance learning (Rasheed et al., 2021). We can fully agree with this. Students' high self-regulatory ability is necessary for working in such learning formats. This will enable them to independently control and optimize their learning process.

For the Ukrainian realities of higher education, this is important in the context of choosing a platform for distance learning and acquiring skills in creating electronic resources (Ishchenko, et al., 2022; Yukhymenko et al., 2024). A high level of self-regulation will ensure high students' productivity in completing their educational tasks in a digital educational environment. One of the ways to determine students' ability to self-regulate is to assess their achievements. In this context, it is important to introduce effective approaches to assessment, in particular, a modular rating system of education. According to it, the main principles of assessing the knowledge of higher school students are: thematic orientation, individual approach, demandingness, differentiation, objectivity, systematicity and motivation (Chovriy, et al., 2024). These indicators cannot be achieved without sufficiently developed students' self-regulation skills.

A number of studies have shown correlations between the students' age, gender and the level of development of their self-regulation skills. The influence of age maturity on the development of self-regulation, on gender differences caused by different methods of representatives of different sexes is indicated (Fawait et al., 2020). The researchers analyse the positive experience of developing and implementing special courses on the development of students' self-regulation skills (Griban et al., 2023). Examples of the use of non-standard approaches to the formation of self-regulation in higher education students, in particular martial arts, are also given. Their impact on self-control, strategic thinking, development of students' emotional intelligence, social adaptation and cognitive functions is proven (Kuzhelnyi et al., 2024). The researchers call self-regulation a key aspect of students' success in the educational environment, and indicate a positive impact

on the phenomenon of the blended learning model under study (Putri & Saifuddin, 2024). Considering self-regulation as management of one's psycho-emotional state, the researchers indicate that it is based on relaxation, visualization, and autosuggestion (Kornienko & Barchi, 2024). We can fully agree with this, because taking into account the psychological aspects of individual self-regulation will allow to rationally organize student learning in the current conditions.

In the academic research, the praxeological approach is defined as the basis for a person's professional success. It provides an optimal combination of theory and practice for the fulfilment of educational tasks, is a means of updating the educational environment, directing it towards self-improvement, self-realization of an individual (Skoryk & Hrytsyk, 2020). The introduction of the praxeological approach into the educational process is associated with the possibility of achieving high results with minimal resources, and the effectiveness of educational activities is achieved (Uvarkina, 2021). Therefore, the praxeological approach can be quite justifiably called a means of improving the quality of education (Oliynyk & Khmelovska, 2023). The use of the praxeological approach in the educational process contributes to the actualization, self-regulation, and self-improvement of an individual (Matsiuk, 2024). This is important in ensuring that students adhere to their defined educational trajectory and achieve a high level of professional competence in the future.

Taking into account the praxeological approach in the educational process improves the quality of teaching, supports students' integrated and sustainable development. It also creates a more relevant, dynamic and valuable learning experience (Nurbayan et al., 2024). This is especially important in the context of the formation of a digital educational environment and ensuring the quality of higher education and the general strategic goals of the development of the education system (Chovriy, et al., 2024). The importance of taking into account the influence of personal didactic praxeologies of higher school teachers, which can be effective or questionable (Doukhan et al., 2024), is noted. The role of the praxeological approach in identifying barriers to effective learning (Fathimah et al., 2024) and the multidisciplinary nature of the use of this approach are indicated (Diskin & Hutchinson, 2024; Zheng et al., 2025). Attention is paid to the study of praxeological components of teaching aids (tasks, methods, technologies, theory) (Fardian et al., 2025), the problem of methodological support for teachers towards their implementation (Cavalcante et al., 2023). However, further thorough research is required to identify effective practices for applying the praxeological approach in the organization of the educational process in HEIs.

Most studies emphasize the importance of self-regulation in achieving academic success and promising professional activities of students. The leading influence of the praxeological approach in ensuring the quality of the educational process is also noted. At the same time, there is a lack of real psychological and pedagogical practices of using the praxeological approach in the development of self-regulation skills of higher school students. This is the impetus for organizing research in this area.

MATERIALS AND METHODS

Research design

The procedure for exploring the development of self-regulation of higher school students during their studies through the praxeological approach consisted of four stages. At the first — organizational — stage a sample was formed, diagnostic tools were selected. The second — summative and diagnostic — stage involved a psychodiagnostics of students' self-regulation. During the third — formative — stage a model of integrating the praxeological approach into the educational process of HEIs was elaborated to form students' self-regulation. At the fourth — final — stage the recommendations were provided for the implementation of the praxeological approach to develop self-regulation in higher school students.

Sampling

A sample of 180 students was formed for the study (83 students of Khmelnytskyi National University and 87 students of Leonid Yuzkov Khmelnytskyi University of Management and Law). The study was conducted at the departments of social work and social pedagogy, psychology and pedagogy of Khmelnytskyi National University. It was also carried out at the Departments of Philosophy, Social and Human Sciences and Physical Education of Leonid Yuzkov Khmelnytskyi University of Management and Law. The criteria for selecting respondents were: studying in 1st–3rd years of undergraduate studies; participation in practice-oriented training; absence of psychological or cognitive disorders that could affect the adequacy of the answers. The representativeness of the sample was ensured by the equal representation of students from both HEIs, different majors, which allows generalizing the results for similar educational conditions. This choice is determined by the fact that these stages of training are accompanied by an active formation of independence, planning, goal setting and evaluation of one's own activities — the main components of self-regulation. Besides, the specifics of the praxeological approach, focused on activity aspects, productivity, effectiveness of training and reflection of actions, were taken into account. The students who are involved in practice-oriented forms of training (seminars, workshops, project activities) provide an opportunity to

effectively implement this approach. Student participation was voluntary, each participant provided informed consent, confidentiality and anonymity of the responses were guaranteed.

Research methods

Students' self-regulation was studied by using psychological diagnostic methods:

- Academic Self-Regulation Questionnaire (SRQ-A) by Ryan and Connell (adapted by Yatsiuk, 2023);
- Mentalization Questionnaire (MZQ) (Hausberg, et al., 2012).

The SRQ-A assesses the motivational aspects that underlie students' self-regulatory behaviour in the educational process. In particular, it covers internal motivation, external control, and self-motivation. This questionnaire gives grounds to understand how students manage their own educational activities, how capable they are of independently planning, controlling, and correcting their educational actions. The questionnaire is structured in the form of four thematic blocks, each containing questions related to the features of students' educational activity. The following regulatory types of motivation are determined based on the respondents' answers: external regulation, introjected regulation, identified regulation, and intrinsic motivation. A Relative Autonomy Index (RAI) is also calculated, which reflects the level of independence in learning motivation.

The MZQ assesses the ability to mentalize. This is the ability to understand one's own and others' mental states. This is an important component of self-regulation. In the context of a praxeological approach that focuses on practical actions and self-control, mentalization is a mechanism that provides reflection and correction of behaviour. The MZQ assesses the extent to which students are able to consciously regulate their emotions, motives and actions, which directly affects the effectiveness of their academic self-regulation. The method consists of 15 statements that the respondent must rate with points from 1 to 5 (from completely disagree to completely agree). The MZQ assesses 4 key aspects of mentalization: refusal of reflection, emotional awareness, mental equivalence, affect regulation.

The integrated use of these techniques provides a deep understanding of both the motivational and cognitive reflective aspects of students' self-regulation. This corresponds to the principles of the praxeological approach, which is aimed at developing effective practical skills of self-control and self-improvement in the educational process.

Quantitative and qualitative analysis (ANOVA) methods were used in the processing and interpretation of

psychological diagnostic data. They identified the level of individual components of self-regulation, determine statistically significant relationships between the studied variables, and provide a reliable empirical basis for further conclusions. The modelling method was used in the development of a model and recommendations for developing self-regulation of higher school students using the praxeological approach. Its use made it possible to visualize the relationships between the key elements of the self-regulation process, as well as to form substantiated recommendations for its improvement in the educational environment.

Instruments

The capabilities of the Microsoft Excel software application were used to record and analyse the research results. It was also used to graphically present the obtained empirical data.

RESULTS

First of all, a psychological diagnosis of the current level of students' self-regulation was carried out. The results of the survey are presented in Figures 1, 2. Statistical significance $F(2, 177) = 6.42; p < 0.01$.

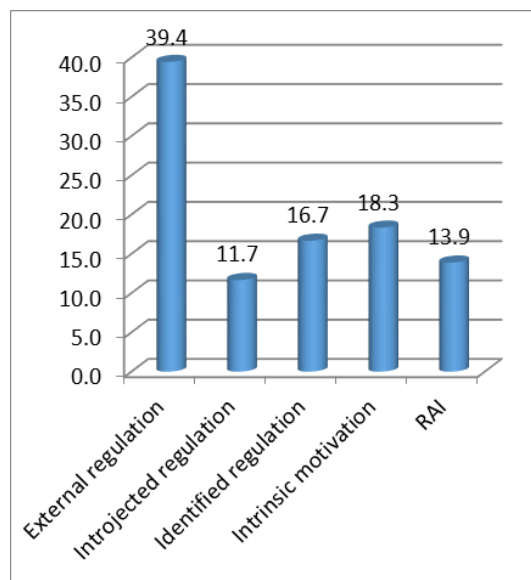


Figure 1: Diagnostic results for the SRQ-A, %

Figure 1 shows that 39.4% of respondents have high indicators of external regulation. This indicates the tendency of individuals in the analysed sample to be influenced by orders, instructions, and guidelines from others. In the studied sample, only a small proportion of respondents (11.7%) showed a high level of introjected regulation. This type of regulation is formed through the internal assimilation of external norms, rules, and values, which, however, remain insufficiently realized and are not integrated into

the structure of the "Self-concept" of an individual. Such a situation may indicate a superficial acceptance of social guidelines without deep internal rethinking.

At the same time, only 16.7% of respondents demonstrate a high level of identified regulation, which arises through identification with an authoritative person or a significant social model, with the subsequent adoption of his behavioural models. Low indicators of this type of self-regulation may be associated with limited experience of social learning or the absence of clearly expressed reference figures in the person's environment.

Only 18.3% of respondents revealed autonomous motivation in the form of their own motivation — the highest level of self-regulation, characterized by internal control over planning, implementation and evaluation of activities. Such statistics may indicate the need to develop self-management skills and internal responsibility in the student environment.

It is also worth noting that a high level of the RAI is inherent in only 13.9% of participants. This indicator indicates the ability of an individual to independently make a conscious choice and regulate their own behaviour in accordance with personal beliefs and external conditions. This may be the result of the low development of the mechanisms of voluntary self-organization, which requires targeted pedagogical influence for their development.

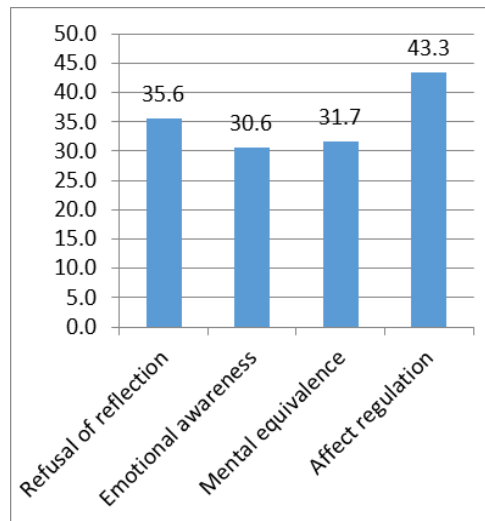


Figure 2: Diagnostic results for the MZQ, %

Figure 2 shows that the largest number of respondents (43.3% of respondents) demonstrated a high rate of Affect Regulation. This indicates that such respondents are characterized by an inability to modulate affect. They usually feel helpless and burdened by their own emotions, which is an obstacle to the development of self-regulation skills

of an individual. Another 35.6% of respondents have high rates on the Refusal of Self-Reflection scale. This indicates their avoidance of reflection on their own internal state, that is, an inability to self-reflect, a tendency to give external events exclusively egocentric interpretations. Furthermore, 30.6% of respondents have high rates of Emotional Awareness, which indicates a lack of differentiation of a person's internal states and emotions, an inability to identify emotions. 31.7% of respondents have high rates of Mental Equivalence (identification of their own mental states and external reality). This indicates that the perception of a critical situation can cause a person emotional experience similar to those that arise during a real traumatic experience. Besides, internal perceptions of interpersonal relationships are unstable, which causes difficulties with adaptation in building relationships and lack of flexibility in communicative behaviour.

Based on the diagnostically established low indicators of students' self-regulation, a decision was made to introduce a praxeological approach focused on increasing the effectiveness of the educational process. For this purpose, a model of the development of students' self-regulation in HEIs using a praxeological approach was developed. In the model, self-regulation is understood as the student's ability to independently plan, organize, control and evaluate their educational activities. The praxeological approach focuses on the effectiveness of activity, its organization, planning, reflection, and optimization. The structural components of the model are presented in Figure 3.

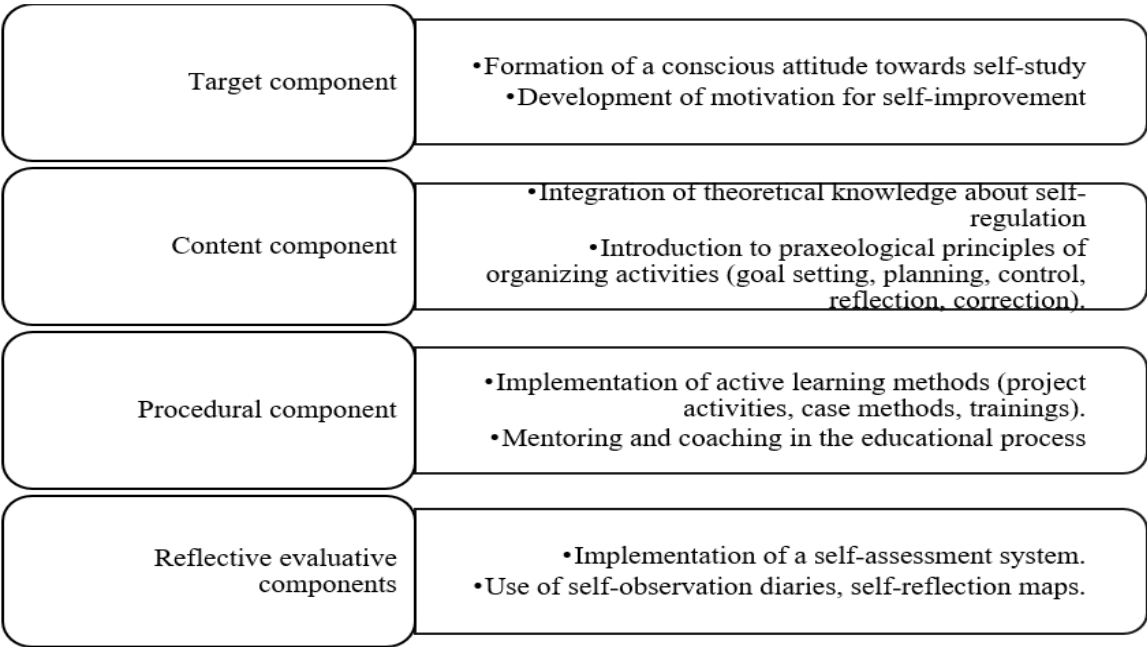


Figure 3: Structure of the model for developing self-regulation of higher school students through a praxeological approach

The following stages are provided for the implementation of the model proposed above: motivational, organizational activity, reflective correctional. At the motivational stage, students are stimulated to self-study, improve self-regulation. During the organizational activity stage, students are involved in various forms of activity. At the reflective correctional stage, the achieved results are analysed, and adjustments are made to their own learning strategies. Measures are proposed at each stage (Table 1).

Table 1: Measures for developing self-regulation of higher school students through a praxeological approach

Sage	Measures
Motivational	Motivational training "I am the author of my success"
	Career guidance meetings with successful graduates
	Self-development clubs: discussion of books, podcasts, personal growth methods.
	Goal setting training "My goals"

Organizational activity	Project activities in teams with role distribution and time management.
	Educational marathon "30 days of effective learning"
	Interactive workshop "Time management techniques"
	Simulations for the development of responsibility and behaviour management.
	Implementation of an electronic learning progress tracker
Reflective correctional	Reflective diary "My week of achievements"
	SWOT analysis of personal achievements
	Flash mob "My path to the goal" with a presentation by students of their plans and achievements

The conducted research gives grounds for making the following recommendations for HEIs regarding the development of self-regulation of higher school students using a praxeological approach (Table 2). They are designed for each of the stages of the analysed process described above. These recommendations provide for students' involvement in various types of activities.

Table 2: Recommendations for HEIs regarding the development of self-regulation in higher school students through a praxeological approach

Stage	Recommendations
Motivational	Introduce educational trajectories that allow students to independently choose the direction and pace of their learning.
	Conduct motivational meetings and trainings aimed at developing internal motivation for learning.
	Use goal visualization methods to form clear educational guidelines.
	Involve students in planning their own learning, which will promote responsibility
Organizational activity	Teach students time management methods through workshops and practical tasks
	Implement the use of personal learning progress trackers
	Organize educational marathons or challenges that develop discipline and consistency skills
	Provide access to mentoring support that helps in setting and implementing personal goals
Reflective correctional	Create conditions for regular self-reflection (reflective journals, summary essays)
	Introduce the practice of mutual assessment among students, which forms critical thinking
	Conduct a SWOT analysis of educational activities in order to identify strengths and weaknesses of self-regulation
	Develop individual strategies for behaviour correction and learning based on a preliminary analysis of the results

Within the proposed model, students' self-regulation is considered in the unity of motivational, cognitive, emotional volitional, and behavioural. The motivational component of students' self-regulation reflects their desire to improve their current level of management of emotions, actions, deeds during training. The cognitive component involves mastering knowledge about ways to increase the level of self-regulation of an individual. The emotional volitional component reflects a set of necessary personal traits necessary to achieve a certain level of self-regulation of an individual. The behavioural component includes rational behavioural models that reflect the development of self-regulation of an individual at a certain level. The expected results of the model implementation are: increasing the level of student autonomy, developing planning, self-control and self-correction skills; developing sustainable skills of effective self-organization in learning and professional activity.

DISCUSSION

The studies related to our study emphasized the importance of developing students' self-regulation. This is a powerful basis for the introduction of digital technologies into the educational process. Students with high levels of self-regulation are ready for autonomy, for acquiring professional competencies in the digital educational environment (Ishchenko, et al., 2022; Yukhymenko et al., 2024). Other studies also identify areas of psychological and pedagogical support for the development of students' self-regulation based on the integrated use of variable forms and means (Furman et al., 2020). We also share the opinion on the appropriateness of introducing a modular rating system of education, where differentiation, objectivity and motivation play a leading role (Chovriy, et al., 2024). The measures for students developed in the model we propose are focused on such components.



Our research takes into account the positions of researchers on increasing the effectiveness of students' educational activities (Uvarkina, 2021), improving the quality of education (Oliynyk & Khmelovska, 2023), and promoting personal self-improvement (Matsiuk, 2024). The models for the development of student self-regulation in HEIs through a praxeological approach are aimed at their implementation. A positive aspect of our approach is the integration of several key components. These are target (formation of a conscious attitude towards self-regulation), content (acquiring knowledge about self-regulation), procedural (students' involvement in projects, trainings, flash mobs), and reflective evaluative (analysis of personal achievements) components. Other studies different from ours consider the most important factors that influence the development of self-regulation in higher school students. It also emphasizes the exchange of learning strategies aimed at developing self-regulation skills in university students (Payan-Carreira et al., 2022). The studies that are different from our study consider students' self-regulation in the context of online learning and preventing social inactivity (Rasheed et al., 2021). It also proves the determination of self-regulation levels by previous experience of educational activities, age and gender differences (Fawait et al., 2020). The studies that are different from our study pay attention to the use of non-standard practices, consolidation of the efforts of teachers, psychologists, trainers in the development of students' self-regulation (Kuzhelnyi et al., 2024)

Our research is distinguished by a comprehensive approach to the development of students' self-regulation. We propose measures to increase the motivational component of students' educational activities. Attention is paid to self-development, self-improvement, which are the basis for improving students' educational results. We also focus on reflection, self-assessment by students of their activities and drawing conclusions on this basis about the determination of learning effectiveness by the ability to self-regulation. The idea of high potential opportunities for students with high self-regulation indicators is confirmed. Such students are not dependent on external influences only (guidelines and instructions of academic and teaching staff), but feel a constant internal need and readiness for learning in any conditions and formats.

The developed model can be applied in the educational process of HEIs in other countries, as it is aimed at increasing the level of students' self-regulation through the use of the achievements of praxeology. The emphasis in our study on the features of semantic derivation in the Ukrainian language and their comparison with unrelated languages is valuable. The results of the study confirm the hypothesis that students have low self-regulation indicators. This is the basis for the implementation of effective, in

particular, praxeological approaches to the development of self-regulation. We propose to improve the quality of education, creating conditions for increasing the effectiveness of students' educational activities. We propose measures and recommendations that increase the current level of students' self-regulation and strengthen their readiness for learning in various new formats, in particular in blended and distance learning, which is important in the face of crises. The results of the study can be used in the educational practice of Ukrainian HEIs to form or adjust students' self-regulation.

Limitations

The main limitations of the study are the involvement of students from only two HEIs, the lack of long-term observation, and the focus only on self-report methods. Another limitation is the failure to take into account the areas of student training when developing a model of student self-regulation in higher education using a praxeological approach.

Recommendations

The main recommendations are to expand the geography and specialization of the respondents. It is also appropriate to take into account the areas of student training when preparing the content of activities within the model of developing student self-regulation in HEIs through a praxeological approach.

CONCLUSIONES

The study examines the topical issue of developing self-regulation of an individual using a praxeological approach, which is currently relevant for HEIs. The main attention is focused on studying the levels of students' self-regulation, the possibilities of a praxeological approach in the development and correction of self-regulation of an individual. It was found that students have high indicators of external regulation, introjected regulation, low indicators of their own motivation, and a relative index of autonomy. Students also demonstrated high indicators of affect regulation, refusal of self-reflection, emotional awareness, and mental equivalence. This indicates that students have difficulties in regulating their own emotional state, identifying their own and other people's emotions, avoiding analysis and designing their own behaviour. Their behaviour is largely determined by external influences, rather than internal needs and beliefs.

A model of developing students' self-regulation in HEIs using a praxeological approach was developed within the scope of the study. It consists of target, content, procedural, reflective evaluative components. The implementation of the model involves motivational, organizational activity, and reflective correctional stages. The model

offers measures for students and recommendations for its implementation.

The obtained results can be used in the educational process of HEIs to increase students' self-regulation during training in various formats. The use of experimental testing of the proposed model of developing self-regulation in HEIs using a praxeological approach among students of different majors is a promising area of research. The content of the proposed measures can be successfully integrated into variable special courses, short-term training programmes for higher school students of different majors.

REFERENCES

- Cavalcante, A., Gagné, A., & Le Pichon-Vorstman, E. (2023). Mathematical benefits of a language-friendly pedagogical tool: A praxeological analysis of teachers' perceptions and practices. *Language, Culture and Curriculum*, 37(1), 27–43. <https://doi.org/10.1080/07908318.2023.2265407>
- Chovriy, S., Marieiev, D., Tsybmal-Slatvinska, S., Vytrykhovska, O., & Tsybulko, A. (2024). Impact of digital technologies on the quality of higher education. *Revista Eduweb*, 18(4), 265–285. <https://doi.org/10.46502/issn.1856-7576/2024.18.04.18>
- Chovriy, S., Vorona, V., Mahas, H., Tkachuk, D., Makhynia, N., & Kurchatova, A. (2024). Peer learning and peer assessment in institutions of higher education. *Revista Eduweb*, 18(3), 119–133. <https://doi.org/10.46502/issn.1856-7576/2024.18.03.10>
- Diskin, K., & Hutchinson, P. (2024). Critical praxeological analysis: Respecifying critical research. *Qualitative Research in Psychology*, 21(4), 512–535. <https://doi.org/10.1080/14780887.2024.2365862>
- Doukhan, C., Gueudet, G., & Quéré, P. V. (2024). Teaching mathematics to non-specialists at university: A praxeological approach. *International Journal of Mathematical Education in Science and Technology*, 1–20. <https://hal.science/hal-04643468/document>
- Fardian, D., Suryadi, D., & Prabawanto, S. (2025). A praxeological analysis of linear equations in Indonesian mathematics textbooks: Focusing on systemic and epistemic aspect. *Journal on Mathematics Education*, 16(1), 225–254. <https://doi.org/10.22342/jme.v16i1.pp225-25>
- Fathimah, N. S. A., Arianti, A. S., & Junaeti, E. (2024). Knowledge to be taught of computational thinking: A praxeological analysis. *Jurnal Pendidikan MIPA*, 25(4), 1752–1770. <http://dx.doi.org/10.23960/jpmipa/v25i4.pp1752-1770>
- Fawait, A., Setyosari, P., Sulthoni, & Ulfa, S. (2020). Identification of factors affecting of character education program on high school students' self-regulation skills. *Journal for the Education of Gifted Young Scientists*, 8(1), 435–450. DOI: <http://dx.doi.org/10.17478/jegys.683155>
- Furman, O., Shandruk, S., Gerasymova, E., Panok, V., Vasylykiv, O., & Lukashuk, M. (2020). Psychological and educational support of students' self-regulation development. *International Journal of Management*, 11(4), 326–338. <https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=3600928>
- Griban, G. P., Serhii, F., Hanna, I., Kudin, K., Zhara, F., Andrii, V., & Nosko, O. (2023). Formation and preservation of students' mental health in the process of studying at pedagogical universities. *Acta Balneologica*, 1(173), 55–60. <http://dx.doi.org/10.36740/ABAL202301110>
- Hausberg, M.C., Schulz, H., Piegler, T., Happach, C. G., Klöpfer, M., Brütt, A. L., Sammet, I., Andreas, S. (2012). Is a self-rated instrument appropriate to assess mentalization in patients with mental disorders? *Psychotherapy Research*, 22(6), 699–709. <https://doi.org/10.1080/10503307.2012.709325>
- Hryniova, M. V., & Kononova, M. M. (2021). *Self-regulation of educational activities and professional development of student youth*. Astraiia. <http://dspace.pnpu.edu.ua/handle/123456789/19692>
- Ishchenko, Y., Matsiiashko, T., Myhovych, I., Didkivska, I., Viktorina, O., (2022). The qualification improvement model for teachers of philology on the use of cloud technologies in pedagogical activity. *Apuntes Universitarios*, 12(3), 199–215. <http://dx.doi.org/10.17162/au.v12i3.1111>
- Korniienko, I. O., & Barchi, B. V. (2024). Self-regulation of the emotional state as the basis of the future specialist formation. *Sloboda Scientific Journal. Psychology*, 1, 80–84. <https://doi.org/10.32782/psyspu/2024.1.14>
- Kuzhelnyi, S., Kudin, S., Kuzhelnyi, A., Zhlobo, T., Shyrai, O., Trotsyk, I., & Davydov, O. (2024). Fostering self-regulation skills among high school students through martial arts training. *Multidisciplinary Reviews*, 7, 2024spe024. <https://doi.org/10.31893/multirev.2024spe024>
- Lyashenko, B. Yu., & Belyaeva, N. E. (2024). Features of the influence of academic self-regulation on the development of cognitive skills in higher education acquires. *Naukovi perspektyvy*, 6(48), 921–930. [https://doi.org/10.52058/2708-7530-2024-6\(48\)-921-930](https://doi.org/10.52058/2708-7530-2024-6(48)-921-930)
- Makarenko, O. V., Makarenko, V. I., Silkova, O. V., Grynova, M. V., & Makarenko, K. S. (2023). Some aspects of self-regulation in the process of forming the research competence of future doctors. *Origins of Pedagogical Skills*, 31, 131–138. <https://doi.org/10.33989/2075-146x.2023.31.283366>
- Matsiuk, V. M. (2024). Praxeological approach in professional training of future physics teachers. *Modern digital technologies and innovative teaching methods: experience, trends, prospects: Materials of the XIII International Scientific and Practical Internet Conference* (Ternopil, 5 April, 2024). Ternopil: Ternopil Volodymyr Hnatiuk National Pedagogical University, 13, 62–64. <http://dspace.tnpu.edu.ua/jspui/bitstream/123456789/32650/1/Matsiuk.pdf>

- Nurbayan, Y., Sanusi, A., Wulan, N. S., & bin Ismail, Z. (2024). Pedagogical competence design: Arabic teaching as a foreign language based on a praxeological approach. *ALSUNIYAT: Jurnal Penelitian Bahasa, Sastra, dan Budaya Arab*, 7(2), 266-290. <http://dx.doi.org/10.17509/alsuniyat.v7i2.73132>
- Oliinyk, N., & Khmelovska, M. (2023). The quality of education from the viewpoint of the praxeological approach. *Modern Information Technologies and Innovation Methodologies of Education in Professional Training Methodology Theory Experience Problems*, 69, 164-171. <https://doi.org/10.31652/2412-1142-2023-69-164-171>
- Payan-Carreira, R., Sebastião, L., Cristóvão, A. M., & Rebelo, H. (2022). How to enhance students' self-regulation. In: J. Dutton (ed.), *The Psychology of Self-Regulation* (pp. 211-232). Nova Science Publishers. <http://hdl.handle.net/10174/35303>
- Putri, A. N., & Saifuddin, M. F. (2024). Self-regulation in problem-based blended learning. *International Journal of Education and Learning*, 6(1), 31-40. <https://doi.org/10.31763/ijele.v6i1.1060>
- Rasheed, R. A., Kamsin, A., & Abdullah, N. A. (2021). An approach for scaffolding students peer-learning self-regulation strategy in the online component of blended learning. *IEEE Access*, 9, 30721-30738. <https://doi.org/10.1109/ACCESS.2021.3059916>
- Senovska, N. & Pryshliak, O. (2020). Developing professional self-regulation of students during pedagogical practice. *International Journal of Research in Education and Science (IJRES)*, 6(4), 679-691. <https://doi.org/10.46328/ijres.v6i4.1147>
- Skoryk, T., & Grytskyk, N. (2020). Implementation of a praxeological approach in the context of preparing a future teacher for a successful professional activity. *Educational Challenges*, 63, 151-158. <http://erpub.chnpu.edu.ua:8080/jspui/bitstream/123456789/7868/1/Реалізація%20праксеологічного%20підходу%20у%20контексті%20підготовки%20майбутнього%20вчителя%20до%20успішної%20професійної%20діяльності%20.pdf>
- Stryzhak, Yu. O. (2021). Self-regulation as a basis of successful professional development of higher educational establishment students. *Image of Modern Pedagogue*, 3(198), 68-71. [https://doi.org/10.33272/2522-9729-2021-3\(198\)-68-71](https://doi.org/10.33272/2522-9729-2021-3(198)-68-71)
- Susanto, R., Nasution, E. S., Sanulita, H., & Lumbantoruan, J. H. (2024). The impact of student psychological factors on self-regulation in learning in primary schools. *Elementary School Forum (Mimbar Sekolah Dasar)*, 11(1), 150-162. <https://doi.org/10.53400/mimbar-sd.v11i1.68907>
- Uvarkina, O. (2021). Personality cryptogram: Signs and symbols of modern changes. *Visnyk of the Lviv University Philosophical Political Studies*, 35, 129-134. <https://doi.org/10.30970/PPS.2021.35.15>
- Yatsuik, M. V. (2023). *Psychology of self-regulation of the individual. Psychological workshop*. Vinnytsia Academy of Continuing Education. <https://docs.academia.vn.ua/handle/123456789/1547>
- Yukhymenko, V., Borysova, S., Bazyl, O., Hubal, H., & Barkar, U. (2024). Station rotation model of blended learning in higher education: achieving a balance between online and in-person instruction. *Conhecimento & Diversidade*, 16(41), 182-202. <http://hdl.handle.net/123456789/10974>
- Zheng, Y., Ortega, L., Pekarek Doehler, S., Sasaki, M., Eskildsen, S. W., & Gao, X. (2025). Praxeology, humanism, equity, and mixed methods: Four pillars for advancing second language acquisition and teaching. *The Modern Language Journal*, 109(S1), 64-89. <https://doi.org/10.1111/modl.12977>