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# FEATURES OF SELF-EDUCATIONAL ACTIVITY OF UNIVERSITY TEACHERS UNDER CONDITIONS OF UNCERTAINTY

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ОСОБЛИВОСТІ САМООСВІТНЬОЇ ДІЯЛЬНОСТІ  
ВИКЛАДАЧІВ ЗАКЛАДІВ ВИЩОЇ ОСВІТИ  
В УМОВАХ НЕВИЗНАЧЕНОСТІ

## 1. Introduction

The professional activity of lecturers at higher education institutions in Ukraine has undergone significant transformations due to changes in the educational process triggered by the COVID-19 pandemic and, subsequently, the introduction of martial law in the country. Under these conditions, lecturers were compelled to fundamentally restructure their work: mastering modern information and digital technologies, developing new forms of educational and methodological support, adapting the educational process to distance and blended learning formats, and enhancing self-management and self-regulation skills (Hniezdilova & Terentieva, 2024). The professional activity of higher education lecturers now occurs under conditions of heightened uncertainty, requiring flexibility, adaptability, and the development of new competences.

## 2. Analysis of recent research

The phenomenon of tolerance for uncertainty in the educational environment has been studied by O. Briukhovetska, O. Miloslavskaya, O. Huliaieva, Ye. Sapiyan, H. Pavlenko, V. Semichenko, K. Artiushyna, S. Khilko, and others. The issue of universal (transversal) competences has been addressed in numerous studies by researchers such as O. Semenoh, O. Popova, O. Kondrytska, Liu Zhijiang, O. Biliakovska, T. Kozhushkina, S. Nakhod, I. Tkachuk, N. Sosnovenko, and T. Smagina.

## 3. The aim of the study

The aim of the study is to highlight the specific features of the self-educational activity of academic staff at higher education institutions under conditions of uncertainty.

## 4. Results

The concept of uncertainty is interpreted differently in philosophical, psychological, social, and pedagogical studies, acquiring various semantic nuances. Researchers propose considering it from both an objective perspective – referring to the presence of multiple possible directions of event development – and a subjective perspective – as a situation that provides an individual with the opportunity to choose among existing alternatives (Semichenko & Artiushyna, 2019). The concept of uncertainty is associated with phenomena such as self-determination and predetermination, tolerance and intolerance, choice and avoidance of choice, cognitive interpretation, risk, loss or preservation of emotional balance, as well as harmony or imbalance within a social context. At the same time, the issues of tolerance for uncertainty and thinking under conditions of instability – as components of a teacher's *soft skills*, which are key to their professional effectiveness and adaptation to life and professional challenges – remain insufficiently addressed in the analyzed psychological and pedagogical literature.

The professional activity and development of university teachers are influenced by various factors that create situations of uncertainty. These include physical, psychological, technological, social, and other aspects of the professional environment. The main manifestations of uncertainty include the novelty and innovativeness of work conditions, the contradiction and complexity of educational situations; a wide range of possibilities for choice and decision-making; unpredictability, which complicates the forecasting of events; and uncontrollability, which creates difficulties in managing situations and responding promptly to unexpected changes (Perehonchuk, 2016).

Scientific studies indicate that a teacher's pedagogical activity is constantly accompanied by psychological tension, caused by a high level of responsibility, the necessity to make decisions in changing conditions, and interaction with various participants of the educational process. In this regard, it is important for university teachers to develop *soft skills*, particularly tolerance for uncertainty and the ability to think effectively under unstable conditions. Among the factors that shape the instability of the teacher's professional environment, researchers highlight the multi-subject nature of educational processes, the hierarchical structure of pedagogical interaction, the dynamism and variability of educational changes characteristic of the contemporary globalized space, as well as the external determination of education by market and societal factors (Semichenko & Artyushina, 2019). Additional sources of uncertainty include the consequences of the COVID-19 pandemic and the full-scale war in Ukraine, which have significantly affected teachers' psychological state and necessitated a rethinking of approaches to professional and self-educational activities.

In view of the above, it is worth emphasizing that university teachers have found themselves in fundamentally new conditions – namely, in a state of *permacrisis*. This term, which means a «prolonged crisis», is characterized by a constant sense of danger, instability, and uncertainty. Recent events, including the pandemic and the war, have disrupted the usual course of life, significantly affecting both the professional and personal spheres of teachers' activities.

According to *Collins Dictionary*, the term *permacrisis* was recognized as the Word of the Year in 2022. This concept, which describes an extended period of instability and danger, topped the list of ten words and phrases that «reflect the evolution of language and the societal concerns of its users» (Hniezdilova & Terentieva, 2024). Thus, it can be argued that Ukrainian university teachers in recent years have carried out their professional activities under conditions of uncertainty, while simultaneously striving to maintain quality, stability, and a high level of professional competence.

Scientific research indicates that a teacher's pedagogical activity is accompanied by constant psychological tension, caused by a high level of responsibility, communicative intensity, and the need to make decisions under conditions of uncertainty. In this context, the development of *soft skills* gains particular importance, among which tolerance for uncertainty and the ability to think in conditions of instability are key for teachers (Tsiura, Humeniuk & Yefremova, 2022). In the European Union countries, the balance between *soft skills* and *hard skills* is considered an integral part of the comprehensive development of professional competencies, which have a universal and functional nature.

In this context, the concept of transversal skills – skills that ensure effective adaptation of a specialist to various life and professional situations – has become increasingly relevant. International documents define them as skills necessary for successful functioning in diverse social and professional contexts, promoting flexibility, mobility, and the capacity for self-development. Researchers interpret the concept of transversal competencies as a set of integrative competencies that enable the transfer of knowledge, skills, and metacognitive abilities to solve life and professional tasks, thereby facilitating personal and professional self-realization. Scholars (Semenog, Popova & Kondrytska, 2021) classify the following among the transversal competencies of higher education teachers: critical thinking, communication skills, creativity, empathy, the ability to search for, process, and analyze information from various sources, the ability to act based on ethical reasoning, orientation toward personal and professional development, as well as the capacity to demonstrate tolerance.

The analysis of scientific sources (Semenog, Popova & Kondrytska, 2021; Semichenko & Artyushina, 2019) allows for the identification of key qualities indicative of a high level of tolerance for uncertainty, which are important for pedagogical activity. Such qualities include the ability to maintain self-control and avoid prolonged stress in unstable conditions; psychophysiological resilience and antifragility; and the capacity to manage one's emotions and regulate emotional states. Cognitive and intellectual attitudes that promote a positive perception of complex, multitasking, and non-linear situations – characterized by a wide range of choices, dynamism, and stepping beyond the comfort zone – are also of significant importance. Furthermore, tolerance for uncertainty is manifested in the ability to respond constructively to challenges, take responsibility, and identify effective ways to solve problems.

A low level of tolerance for uncertainty can pose a significant obstacle in multi-actor activities, particularly in the pedagogical sphere. Scholars (Semenog, Popova & Kondrytska, 2021; Semichenko & Artyushina, 2019) characterize intolerance to uncertainty through a number of distinctive features, including: feelings of discomfort, threat, insecurity, vulnerability, and distrust toward oneself and others; a tendency to apply cognitive strategies that simplify the perception of situations, such as stereotyping, polarization, hasty decision-making, and the inclination to delegate responsibility; a need for clear categorization; and dichotomous thinking, which leads to a preference for the familiar and habitual.

According to N. Perehonchuk (2016), uncertainty has a motivating force for the individual: «Situations of errors, crises, stagnation, and other phenomena, which are often perceived as negative, in one way or another constitute an integral

part of the process of self-organization or transition to a new stage of development and professional stability». The researcher considers uncertainty as an important condition for personal growth, the realization of creative potential, a source of innovations, discoveries, and opportunities for forming a new identity. She emphasizes that situations of uncertainty directly influence the professional development of specialists, contributing to their adaptation to global challenges and threats, strengthening mental and physical health, self-actualization, and personal improvement. Other scholars (Anderson, 2021; Luke Moorhouse & Wong, 2022) also highlight that situations of instability and uncertainty are powerful factors in activating creative thinking, searching for non-standard solutions in professional activities, as well as catalysts for pedagogical and technological innovations that promote the dynamic development of educators.

Tolerance for Uncertainty is understood as an individual's ability to function effectively in situations where clear guidelines, predictability, or stability are absent. For a university lecturer whose professional activity involves constant changes in content, forms, and teaching technologies, this quality acquires particular significance. The key characteristics indicating a high level of tolerance for uncertainty include:

1. *Cognitive Flexibility* – the ability to quickly shift perspectives, adjust educational strategies, and adopt new approaches in response to changing conditions. Such a lecturer can easily transition from traditional teaching methods to digital formats and integrate innovative tools into their practice.

2. *Openness to New Experiences* – the willingness to experiment, engage in lifelong learning, and embrace new knowledge even in the absence of guaranteed success. This quality fosters continuous professional renewal.

3. *Self-Regulation* – the capacity to control one's emotions and maintain a productive psycho-emotional state during crises or unforeseen events, forming the foundation of psychological resilience in the self-educational process.

4. *Reflectiveness* – awareness of one's actions, motives, outcomes, and mistakes, enabling self-analysis and the improvement of personal learning strategies.

5. *Optimism and Self-Confidence* – an internal orientation toward success, a positive attitude toward challenges as sources of development, which stimulates self-directed educational activity.

6. *Adaptability* – the ability to respond swiftly to changes in the educational environment, digital technologies, and social demands, adjusting one's activities to new realities.

7. *Creativity* – the capacity to generate unconventional ideas and develop new solutions and approaches under conditions of limited information or partial uncertainty.

These characteristics form an integrated system of personal and professional qualities that ensure the effectiveness of a lecturer's self-educational activity under conditions of uncertainty.

In modern conditions, the self-educational activity of university lecturers undergoes significant transformations under the influence of a combination of external and internal factors.

*External factors include:*

- Digitalization of education, which requires lecturers to master new digital tools, platforms, and environments for distance and blended learning;
- Socio-economic and political instability, including military challenges, which generate a constant sense of uncertainty, reduced safety, and the need to adapt educational processes;
- Globalization processes, which stimulate integration into the international educational space and increase competition among academic staff;
- Transformation of educational policy and changes in higher education standards, which imply updates to content, methods, and teaching technologies.

*Internal factors include:*

- Motivational attitudes of lecturers, oriented toward professional growth, self-realization, and improving the quality of the educational process;
- Level of digital and informational competence, which determines the ability to effectively utilize resources for self-education;
- Psychological readiness for change, encompassing the capacity to overcome anxiety, uncertainty, and risk while maintaining productivity;
- Value orientations – the awareness of the significance of continuous education and self-education as an intrinsic need rather than merely an external requirement.

As a result of the influence of these factors, contradictory trends are observed. On the one hand, there is an increase in autonomy, digital literacy, and the development of flexible competencies, along with the formation of a culture of continuous learning. On the other hand, the risk of emotional exhaustion, information overload, and a sense of professional uncertainty is intensified. Thus, tolerance for uncertainty acts as an adaptive mechanism that enables lecturers not only to maintain the effectiveness of their self-education in conditions of instability but also to transform external challenges into a resource for professional growth.

In the context of a higher education lecturer's professional development, self-educational activity emerges not only as a means of updating knowledge and competencies but also as a mechanism for overcoming uncertainty and adapting

to new educational realities. Tolerance for uncertainty is one of the key factors that determines the quality, depth, and effectiveness of this process.

It should be noted that a lecturer's self-educational activity, oriented toward independent acquisition of knowledge and mastery of new technologies and methods, takes place in an environment where conditions, resources, and final outcomes cannot be fully predicted. In such situations, tolerance for uncertainty ensures: 1) a positive perception of change, openness to experimentation, and the readiness to view uncertainty as an opportunity for professional growth rather than a threat; 2) the maintenance of intrinsic motivation for self-education even in the absence of external incentives or support; 3) the ability to make decisions under incomplete or conflicting information, which is typical of the modern educational environment; 4) the development of autonomy and independence, whereby the lecturer determines their own trajectory of professional growth, sources of information, and criteria for evaluating results; 5) effective self-regulation, which allows for maintaining productivity and emotional stability while working with large volumes of new information; 6) and reflection, through which the lecturer analyzes their own experience, evaluates the effectiveness of self-educational strategies, and makes adjustments for future activities.

Thus, tolerance for uncertainty serves as a fundamental psychological prerequisite for the successful implementation of self-educational activity. It contributes to the development of a stable motivation for lifelong learning, the enhancement of adaptability, and the capacity for creative self-expression within the professional sphere.

In conclusion, a high level of tolerance for uncertainty ensures the integration of cognitive, emotional, and behavioral components of self-educational activity, promotes the professional flexibility of the lecturer, and fosters their readiness for effective performance in conditions of constant change and instability.

## 5. Conclusion

The study established that tolerance for uncertainty is an important personal and professional characteristic of higher education lecturers, which directly affects the effectiveness of their self-educational activity. In the context of constant changes, digitalization, and social instability, this quality ensures the ability to adapt to new challenges, maintain motivation for professional self-development, and preserve psychological resilience.

The identified characteristics of tolerance for uncertainty – flexible thinking, openness to new experiences, self-regulation, adaptability, reflexivity, and

creativity – serve as key factors that contribute to the effective implementation of lecturers' self-educational activity. Both external and internal factors driving the transformation of this activity have been identified, with digitalization of education, globalization processes, lecturers' motivational readiness for change, and value orientation toward lifelong learning playing a leading role.

It has been concluded that the development of tolerance for uncertainty should be regarded as an integral component of a teacher's professional formation and a necessary condition for their capacity for self-development. The development of this quality contributes to the enhancement of self-educational competence, the strengthening of stress resilience, and the improvement of professional performance in a dynamic educational environment.

### *Perspectives of further research*

*Promising directions for further research* include an in-depth study of the psychological determinants of self-educational activity among higher education lecturers, in particular, the role of tolerance for uncertainty, motivational attitudes, and cognitive strategies in ensuring the effectiveness of professional self-development.

**ABSTRACT:** This article explores the issue of tolerance to uncertainty in the self-educational activity of higher education teachers. The study aims to examine the specific features of teachers' self-education under conditions of uncertainty. Based on an analysis of scientific and pedagogical literature, it is highlighted that the concept of uncertainty is interpreted differently across various contexts and encompasses a multifaceted meaning. Tolerance to uncertainty and the ability to think effectively under unstable conditions, as key components of a teacher's soft skills, are emphasized as essential for professional effectiveness and adaptability to change. The study identifies key characteristics indicative of high tolerance to uncertainty: cognitive flexibility, openness to new experiences, self-regulation, reflexivity, optimism, adaptability, and creativity. Conversely, intolerance to uncertainty manifests through negative experiences, such as discomfort, perceived threat, insecurity, vulnerability, and distrust of oneself and others. The factors influencing changes in teachers' self-educational activity are outlined, including the digitalization of education, socio-economic instability, transformation of educational policy, and the necessity for professional self-development and psychological resilience. These changes result in increased digital and psychological competencies, greater autonomy in professional development, as well as potential risks such as emotional exhaustion and information overload. Effective management of uncertainty requires a systematic integration of personal qualities and professional self-education strategies. The findings indicate that tolerance to uncertainty is a key condition for successful self-educational activity and professional

self-realization in the contemporary educational environment. Overall, it contributes to more effective self-education, enhanced stress resilience, and improved professional performance under emerging challenges. Future research should focus on the psychological determinants of teachers' self-educational activity and their influence on adapting to changes in the educational environment.

**KEYWORDS:** higher education institution, lecturer, self-educational activity of a higher education lecturer, conditions of uncertainty, tolerance for uncertainty, transversal competences, soft skills

**STRESZCZENIE:** Artykuł poświęcony jest problemowi tolerancji wobec niepewności w działalności samokształceniowej wykładowców uczelni wyższych. Celem artykułu jest analiza specyfiki samokształcenia wykładowców w warunkach niepewności. Na podstawie przeglądu literatury naukowo-pedagogicznej stwierdzono, że pojęcie niepewności interpretowane jest w różnych kontekstach i ma wieloaspektowe znaczenie. Podkreślono, że tolerancja wobec niepewności oraz zdolność do myślenia w warunkach niestabilności, jako istotne elementy „soft skills” wykładowcy, są kluczowe dla jego efektywności zawodowej oraz adaptacji do zmian. Wyróżniono główne cechy świadczące o wysokiej tolerancji wobec niepewności: elastyczność myślenia, otwartość na nowe doświadczenia, samoregulację, refleksyjność, optymizm, adaptacyjność i kreatywność. Z kolei nietolerancja wobec niepewności przejawia się przez negatywne doświadczenia, takie jak dyskomfort, poczucie zagrożenia, niepewność, brak poczucia bezpieczeństwa i brak zaufania do siebie i otoczenia. Omówiono czynniki zmian w działalności samokształceniowej wykładowców, w tym cyfryzację edukacji, niestabilność społeczno-ekonomiczną, transformację polityki edukacyjnej oraz potrzebę rozwoju zawodowego i zachowania odporności psychicznej. Wskazano konsekwencje tych zmian: wzrost kompetencji cyfrowych i psychologicznych, większą samodzielność w rozwoju zawodowym, a także ryzyko wypalenia emocjonalnego i przeciążenia informacyjnego. Zaznaczono, że skuteczne radzenie sobie z niepewnością wymaga systemowego połączenia cech osobowościowych z profesjonalnymi strategiami samokształcenia. Stwierdzono, że tolerancja wobec niepewności jest jednym z kluczowych warunków skutecznego samokształcenia i realizacji zawodowej wykładowcy w nowoczesnym środowisku edukacyjnym. Podsumowano, że wysoka tolerancja wobec niepewności sprzyja efektywności samokształcenia, wzmacnia odporność na stres i zwiększa skuteczność działań zawodowych w obliczu nowych wyzwań. W perspektywie istotne jest dalsze badanie psychologicznych determinantów działalności samokształceniowej wykładowców oraz ich wpływu na adaptację do zmieniającego się środowiska edukacyjnego.

**SŁOWA KLUCZOWE:** uczelnia wyższa, wykładowca, działalność samokształceniowa wykładowcy uczelni wyższej, warunki niepewności, tolerancja na niepewność, kompetencje transferowalne, umiejętności miękkie

**АНОТАЦІЯ:** Стаття присвячена дослідженню проблеми толерантності до невизначеності у самоосвітній діяльності викладачів закладів вищої освіти. Мета статті полягає у вивченні особливостей самоосвітньої діяльності викладачів ЗВО в умовах невизначеності. На основі аналізу науково-педагогічних джерел узагальнено, що поняття невизначеності трактується в різних контекстах і має багатогранне змістове наповнення. Підкреслено, що толерантність до невизначеності та здатність мислити в умовах нестабільності, як важливі складові «soft skills» викладача, є ключовими для його професійної ефективності та адаптації до змін.

Виокремлено основні характеристики, які свідчать про високу толерантність до невизначеності: гнучкість мислення, відкритість до нового досвіду, саморегуляція, рефлексивність, оптимізм, адаптивність і креативність. Інтолерантність до невизначеності, навпаки, проявляється через негативні переживання, такі як дискомфорт, відчуття загрози, невпевненість, незахищеність, недовіру до себе та оточення. Розкрито чинники змін у самоосвітній діяльності викладачів, серед яких – цифровізація освіти, соціально-економічна нестабільність, трансформація освітньої політики, потреба у професійному саморозвитку та збереженні психологічної стійкості. Визначено наслідки цих змін: підвищення цифрової й психологічної компетентності, зростання самостійності у професійному розвитку, а також ризики емоційного виснаження та інформаційного перевантаження. Зазначено, що ефективне подолання невизначеності потребує системного поєднання особистісних якостей і професійних стратегій самоосвіти. Констатовано, що толерантність до невизначеності є однією з ключових умов успішної самоосвітньої діяльності та професійної самореалізації викладача в сучасному освітньому середовищі. Підсумовано, що толерантність до невизначеності сприяє ефективному здійсненню самоосвітньої діяльності, зміцненню стресостійкості та підвищенню результативності професійної діяльності в умовах нових викликів. У перспективі важливо приділити увагу дослідженню психологічних детермінант самоосвітньої діяльності викладачів вищої школи та їхнього впливу на адаптацію до змін освітнього середовища.

**КЛЮЧОВІ СЛОВА:** заклад вищої освіти, викладач, самоосвітня діяльність викладача вищої школи, умови невизначеності, толерантність до невизначеності, трансверсальні компетентності, м'які навички

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