

FORMATION OF COMMUNICATIVE COMPETENCE OF FUTURE VOCAL DISCIPLINES TEACHERS

Yaroslav Yotka

Department of Vocal and Choral Mastery

Faculty of Pedagogy, Psychology, Social Work and Arts

Nizhyn Mykola Gogol State University

Nizhyn, Ukraine

yotka.yaroslav@ndu.edu.ua

<https://orcid.org/0000-0002-6885-6687>

ABSTRACT. This article explores the structure of communicative competence and the principles underlying its development within professional activities. Through a scientific literature perusing, the paper identifies key components of communicative competence, including goal-oriented motivation, cognitive-linguistic elements, procedural-technological skills, and reflective-evaluative aspects. The structure of communicative competence is examined as a multi-component system, where each element plays a crucial role in achieving professional effectiveness. The article emphasizes the importance of the interrelation between structural components and the principles guiding the formation of communicative competence. Key principles ensuring effective development of communicative competence include objectivity, specificity, scientific approach, dialectical reasoning, determinism, integrativeness, professional mobility, motivation, self-organization, rational integration of collective and individual work forms, and practical application. The findings of this study can be applied in educational settings to enhance methodologies for developing communicative skills and competencies. The conclusions reinforce the necessity of a systematic approach to forming communicative competence based on the identified principles and components..

Keywords: communicative competence, pedagogical communication, structural components, formation principles, professional training, educational effectiveness.

INTRODUCTION

In the nowadays context of reforming the higher education system in Ukraine and integrating it into the European educational space, new demands are being placed on educators, particularly those teaching creative disciplines. One of the most significant among these demands is the ability not only to impart knowledge but also to communicate effectively, creating a conducive environment for the creative development of students. This is particularly relevant for vocal disciplines lecturers, who consider communication not merely as a tool, but an integral part of the educational process.

Communicative competence plays a crucial role within the context of training future vocal disciplines teachers as it determines the educators' ability to communicate effectively with students, motivate them to learn, and carry out educational activities at a high level. In case of increasing demands for the professional training of music educators, the issue of developing communicative competence is becoming more pressing and requires thorough

scientific analysis.

Vocal art entails a close connection between the teacher and the student, where every detail matter from intonation to non-verbal communication. A vocal tutor not only teaches the technical aspects of singing but also fosters students' abilities to express themselves, communicate with the listener, and moreover to convey emotions and ideas through music (Shumska et al., 2024). Therefore, it is extremely important for future vocal disciplines instructors to master communicative competence which includes the ability for effective communication, emotional understanding and adaptation to different communicative situations. As future educators, vocal teachers must not only master their craft but also possess the ability to effectively communicate and convey complex artistic, technical, and pedagogical concepts to their students. The unique demands of vocal instruction—where verbal, non-verbal, and musical communication intersect—necessitate a comprehensive understanding of communicative strategies that can foster a dynamic and engaging learning environment (Yotka, 2021).

This article delves into the structure of communicative competence, exploring its multi-component nature and the principles that guide its development within the professional activities of vocal teachers.

Drawing from a wide range of scientific literature, the article identifies key components of communicative competence: goal-oriented motivation, cognitive-linguistic elements, procedural-technological skills, and reflective-evaluative aspects. Each of these components plays a vital role in ensuring professional effectiveness and the ability to engage meaningfully with students. The study emphasizes the importance of interrelations between these structural components and outlines guiding principles for the formation of communicative competence. Principles such as objectivity, specificity, a scientific approach, dialectical reasoning, integrativeness, and professional mobility are discussed as essential for fostering effective communication skills in future vocal educators.

The theoretical significance of this study lies in its examination of contemporary approaches to developing communicative competence, grounded in the principles of pedagogical psychology, art pedagogy, and music education. The practical significance of this research focuses on creating and implementing effective teaching methodologies that enhance this competence among future vocal instructors.

The relevance of this research to important scientific tasks stems from the need to adapt pedagogical methods to current educational conditions, especially considering the growing importance of communicative skills in the learning process. This research is pertinent due to the demands of the modern labor market, where educators must not only possess professional knowledge but also communicate effectively with diverse audiences.

However, an analysis of current pedagogical practices reveals that not all graduates from higher education institutions preparing for teaching careers exhibit a sufficiently high level of communicative competence. This gap can adversely affect the quality of the educational process, diminishing students' motivation and hindering effective learning.

Therefore, the issue of future vocal tutors' communicative competence developing is of critical importance. It necessitates a comprehensive approach, including the creation and application of effective teaching methods designed to cultivate communicative skills and

abilities. This research aims to identify the most effective methods for this competence developing and to provide recommendations for their integration into the professional preparation of future educators.

MATERIALS AND METHODS

The study on the formation of communicative competence of future vocal disciplines teachers employed a comprehensive methodological framework grounded in a multidisciplinary analysis of scientific literature and empirical observation.

This study utilized a variety of scientific literature sources, focusing on research related to communicative competence within pedagogical contexts. This literature review focused on various domains such as education, linguistics, psychology, and pedagogy to develop a holistic understanding of communicative competence relevant to the professional training of vocal teacher. Emphasis was placed on studies examining the nuances of communicative competence among future music educators. Key components identified include cognitive, emotional, and behavioral aspects, which facilitate a comprehensive analysis of communicative competence in the realm of vocal education.

The methodological approach encompassed a theoretical perspectives analysis of the communicative competence development, as well as an evaluation of specific pedagogical conditions and practices that impact this development in prospective vocal educators.

The leading research method is the system method. A systematic approach was applied to synthesize findings from both the literature review and empirical observations. This approach involved constructing a framework for the formation of communicative competence, which incorporates key principles such as determinism, integrativeness, professional mobility, motivation, and self-organization. The framework also aimed to demonstrate how the rational integration of collective and individual work forms and practical application can be effectively utilized to develop communicative competence.

A qualitative content analysis of the reviewed literature was carried out to identify and categorize the components of communicative competence—goal-oriented motivation, cognitive-linguistic elements, procedural-technological skills, and reflective-evaluative aspects. This analysis also focused on recognizing the principles that guide the development of communicative competence, including objectivity, specificity, a scientific approach, and dialectical reasoning.

The study employed a comparative analysis to examine the interrelationships between the structural components of communicative competence and the guiding principles. This method was used to assess how these components and principles interact to enhance professional effectiveness in vocal disciplines teaching and to determine best practices for their integration into teacher training programs.

Scientific sources were employed to establish core principles and strategies that enhance the communicative skills development in music education. Additionally, these sources helped to identify factors conducive to effective pedagogical practices. To gain a deeper understanding of future vocal educators' communicative competence, methods such as comparative analysis and synthesis of information from diverse scientific sources were utilized. This approach enabled the knowledge generalization regarding the specifics of

communicative activity in music education and highlighted the key factors influencing its effectiveness.

By integrating these materials and methods, the study provides a comprehensive examination of the factors influencing the formation of communicative competence in future vocal discipline teachers. The findings aim to inform and improve pedagogical practices, enhancing the overall effectiveness of teacher training programs in this specialized field.

RESULTS AND DISCUSSION

The competence-based approach is a pivotal element in modern education, designed to prepare highly qualified specialists capable to thrive in a rapidly evolving world. This approach is particularly relevant in pedagogical training, especially in the context of vocal disciplines teaching.

The competence-based approach extends beyond mere knowledge transfer; it emphasizes the development of practical application skills. For future educators, this means not only possessing theoretical knowledge but also demonstrating effective communication, organizing the learning process, adapting to diverse educational situations, and fostering students' creative activities.

In academic settings, the competence-based approach serves as a transformative tool in education. Its primary aim is to cultivate and enhance personal and professional knowledge among future specialists. This modern educational paradigm enables students to build a comprehensive set of professional competencies. The underlying principle is that educational outcomes should encompass not only individual knowledge, skills, and abilities but also the capacity and readiness for effective and productive engagement (Ostapenko, 2015).

Implementing the competence-based approach involves restructuring the educational process to focus on activity-based learning. This approach transforms students from passive recipients into active participants who develop as individuals. It has proven effective in addressing educational and societal contradictions and has contributed to aligning education systems with global standards (Shevchuk, 2017).

A key advantage of the competence-based approach is its emphasis on developing a well-rounded set of skills that contribute to the holistic development of students. It integrates knowledge, abilities, and values, preparing graduates to be competitive in the labor market, where self-learning, critical thinking, teamwork, and effective communication are crucial.

In preparing future music educators, the competence-based approach is instrumental in cultivating essential professional competencies. Unlike traditional education systems that focused primarily on knowledge accumulation, this approach prioritizes the practical application and creative problem-solving abilities of students (Ostapenko, 2015).

For vocal educators, the competence-based approach facilitates the development of not only technical singing skills but also students' creative individuality, artistry, and emotional expressiveness. This demands that educators master diverse methodologies and engage in ongoing professional development. Furthermore, this approach enhances educational quality by focusing on achieving measurable learning outcomes, providing a more objective assessment of students' academic performance and their readiness for professional challenges.

The competence-based approach is crucial in forming communicative competence, which is fundamental to successful professional activity, especially for educators who must interact effectively with students, colleagues, administration, and parents.

Professional competence, as outlined by Sverdlyov and Rubtsova, includes several components: professional, social, personal, and pedagogical competencies. Professional competence involves in-depth subject knowledge, teaching methodologies, and an understanding of the educational environment. Social competence highlights the ability to collaborate and make responsible decisions, while personal competence emphasizes self-education and reflection. Pedagogical competence, which includes communicative skills and proficiency in information technologies, is integral to modern education (Kravets, 2023).

Pedagogical competence is particularly critical, encompassing communicative skills that enable educators to not only impart knowledge but also establish effective interactions with students and colleagues. Given its significance, it is essential to clearly define communicative competence and its development within professional training.

Communicative competence is a crucial aspect of a teacher's professional abilities, facilitating effective knowledge transmission, relationship building, and the creation of a positive learning environment. In contemporary education, where communication is vital to achieving educational goals, understanding communicative competence is increasingly relevant. This concept involves not only the ability to articulate thoughts clearly but also skills in listening, engaging in dialogue, arguing positions, and considering social and cultural contexts.

Kasyarum defines communicative competence as the ability to navigate pedagogical communication situations based on knowledge and sensory experience to address communicative tasks. It includes the readiness to understand one's own and others' motives and behavior strategies, as well as the ability to communicate effectively within business contexts to achieve professional objectives. Additionally, it encompasses mastering communication technologies that support effective knowledge transfer and create conducive learning environments (Kasyarum, 2019).

An examination of communicative competence various definitions reveals its multifaceted nature and significance in educators' professional activities. The complexity of this concept varies with different scientific approaches and research contexts, highlighting the need for further exploration. The table below summarizes key definitions of communicative competence from various researchers, illustrating it as a complex trait that integrates knowledge, abilities, skills, cultural norms, and personal qualities essential for effective professional interaction.

Table 1. The definition of communicative competence

Author	Main Idea About Communicative Competence
D. Hymes	Communicative competence is the knowledge of rules for understanding and creating the informational and social content of utterances.
O. Selivanova	Communicative competence is the ability to use linguistic knowledge, paraverbal means, norms, and rules of communication to effectively perform communicative tasks.

Author	Main Idea About Communicative Competence
S. Pochtyarov	Communicative competence is a set of communicative and organizational skills, including self-expression, argumentation, empathy, self-control, and communication culture.
L. Havrilyak	Communicative competence is a generalized communicative quality of personality, which includes knowledge, skills, and interpersonal communication abilities.
O. Kraievskaya	Communicative competence is an integral characteristic based on knowledge, experience, and motivation that allows communication to be conducted at a high level.
M. Halytska	Communicative competence is an integral quality of personality that combines general communication culture with professional manifestations.
I. Kohut	The communicative competence of a teacher is a conscious understanding of communication value for professional activity, including communicative knowledge, skills, ethical norms, and emotional intelligence.
O. Korniyak	Communicative competence is a component of basic competence necessary for performing complex professional tasks in diverse relationships and interactions.
N. Volkova and O. Lebid	The communicative competence of a teacher is an integral personal formation that ensures effective communication in professional activity through mastering communication technologies and enriching communicative experience.

Notes: Created by the author based on source Sypchenko, O., Haran, N., & Boiko, I. (2022).

To effectively cultivate future educators' communicative competence, it is essential to explore its structure, components, and development methods comprehensively. This involves examining both verbal and non-verbal aspects of communication, enhancing emotional intelligence, adapting to various communicative situations and audiences, and refining interpersonal interaction skills. Teachers must not only acquire professional knowledge but also master effective communicative strategies to ensure successful professional performance.

The analysis of scientific literature underscores the importance of two fundamental categories in understanding a teacher's communicative competence: pedagogical communicative competence and pedagogical communication. According to O. Borovets, pedagogical communicative competence is the outcome of mastering social experience, which develops gradually through personality growth. This process includes selectively assimilating others' experiences, imitating successful communicative models, and adapting interaction styles to identify the most effective forms of participation in communicative acts. A crucial aspect of this process is the teacher's personal experience in establishing communicative connections, which significantly contributes to their professional development (Borovets, 2016).

In the realm of professional-pedagogical communicative competence, several key components are essential for effective pedagogical communication. Research highlights the importance of a consistent need for diverse communication with students, the interplay of general human and professional elements of communicative competence, and emotional satisfaction throughout the communication process. Essential qualities such as cognitive, expressive, and managerial abilities are integral to a teacher's communicative competence, facilitating perception, understanding, influence, and emotional expressiveness. Developing these qualities enables teachers to perform their professional-pedagogical duties effectively,

including in pedagogical communication, which, while sharing general features with human communication, also has unique aspects. Pedagogical communication is closely tied to social needs and the ability to convey social and personal experiences. The success of this communication largely depends on the communicative competence of both teachers and students, influencing the effective exchange of knowledge and experience within the educational process (Borovets, 2016).

Given the critical role of communicative competence in teaching, clear structuring is necessary. Communicative competence, as a comprehensive personal characteristic, comprises multiple interacting components that underpin effective pedagogical activity. Without clear structuring, the fragmented development of these components may adversely affect overall professional preparation. Thus, communicative competence should be regarded as a multi-component system, where each element contributes significantly to effective communication in education.

Structuring communicative competence facilitates not only the organization of knowledge, skills, and abilities but also their targeted development during professional training. This structured approach enables teachers to navigate various pedagogical situations more effectively, adapt to evolving educational environments, and interact productively with students, colleagues, and parents. A well-structured communicative competence lays the foundation for developing other professional qualities such as pedagogical mastery, emotional intelligence, reflection, and innovative activity.

Based on an analysis of scientific literature on the structuring of communicative competence for future specialists, S. Haletskyi has proposed a structure of this competence consisting of several key components.

Table 2. The Structuring of communicative competence of future professionals according to Haletskyi

Component	Content	Detailed Description
Goal-Motivational Component	Level of interest and motivation to develop communicative competence	This component reflects personal interest in advancing communicative competence. It includes motivation to master modern information and communication technologies essential for effective communication and professional activity.
Cognitive Component	Systematic knowledge and skills in communication	This component encompasses systematic knowledge required for effective communication. It includes understanding communication, pedagogy, psychology, and social interaction mechanisms, along with personal qualities that support professional competence development.
Procedural-Technological Component	Skills and abilities to use communicative technologies	This component involves developing practical skills and abilities for effective communication. It emphasizes proficiency in modern information and communication technologies relevant to both learning and professional contexts.

Component	Content	Detailed Description
Reflective-Evaluative Component	Evaluation and self-reflection of the level of communicative competence	This component focuses on assessing the level of developed communicative competence. It includes self-reflection processes where individuals evaluate their communicative skills and their application in practice, with the assistance of information and communication technologies for evaluation and development.

Notes: Created by the author based on source Haletskyi, S. (2020).

This structure offers a comprehensive framework for developing communicative competence, which is crucial for effective professional communication.

Understanding how the structural components of communicative competence interrelate with the principles of its formation is vital for grasping its developmental process. Each component of communicative competence is intricately connected to specific principles that guide its effective formation and enhancement.

The Principle of Integrity emphasizes viewing communicative competence as a cohesive whole, where each component (goal-motivational, cognitive, procedural-technological, reflective-evaluative) interacts and complements the others. This principle ensures the balanced development of all components, preventing any single aspect from overshadowing the others.

The Principle of Continuity underscores the importance of ongoing updating and improvement of communicative competence throughout one's professional career. It is associated with the goal-motivational component, which drives continuous development, and the reflective-evaluative component, which supports self-monitoring and self-assessment.

The Principle of Individualization considers individual characteristics and needs in the communicative competence development. This principle relates to the cognitive and procedural-technological components, which must be adapted to the specific conditions and abilities of the individual.

The Principle of Activity Approach highlights the necessity of active engagement in real communicative situations to effectively develop competence. It is connected to the procedural-technological component, ensuring the practical application of communicative skills in various conditions.

The Principle of Reflection fosters awareness of one's actions and outcomes, promoting self-improvement. This principle is directly related to the reflective-evaluative component, which involves analyzing communicative activities and addressing areas for improvement.

These principles collectively facilitate the effective interaction of the structural components of communicative competence, fostering comprehensive development and professional growth.

In L. Nanyvska's research, additional principles are identified that further contribute to the formation of communicative competence. These principles enhance and broaden the general concept, offering a more detailed approach to competence development. The table below outlines these principles and provides a detailed description:

Table 3. Principles of communicative competence formation

Principle	Description
Objectivity	The formation of communicative competence relies on the accuracy of knowledge, achieved through the use of methods, techniques, and practices that provide an objective reflection of the surrounding world.
Determinism	The connection between professional preparation and the development of communicative competence, where professional experiences and growth influence the individual's communicative abilities.
Dialectical Logic	The application of dialectical thinking to outline the key paths of objective professional development, aiding in creating a logical sequence in the formation of communicative competence.
Truthfulness	Ensuring an accurate reflection of professional activities, which helps in forming a realistic understanding of professional requirements and communicative tasks.
Activity	The development of communicative competence through active personal engagement, involving deliberate efforts to improve communicative skills and abilities.
Specificity	The use of methods such as deduction, induction, integration, and syncretization to address specific aspects of communicative competence, tailored to practical needs.
Scientific Approach	Fostering a systematized scientific perspective that includes foundational scientific concepts, theoretical positions, and skills essential for professional growth.
Integrative Approach	Utilizing interdisciplinary connections to enhance the content of disciplines with practical tasks, leading to a more profound and comprehensive understanding of communicative knowledge.
Professional Mobility	Focusing on the ability of specialists to adapt quickly to various communication contexts, acquiring a set of self-educational competencies to meet professional challenges effectively.
Motivation	Establishing pedagogical conditions that encourage an active personal stance and the full realization of communicative potential.
Self-Organization	The importance of self-improvement, initiative, and the ongoing updating of knowledge and skills, contributing to professional growth and the enhancement of communicative competence.
Rational Combination of Work Forms	Balancing collective and individual learning methods to ensure a comprehensive approach to developing communicative skills and competencies.
Practical and Applied Orientation	Emphasizing the link between theoretical knowledge and its practical application to ensure effective professional activity and the development of essential communicative skills.

Notes: Created by the author based on source Nanyvska, L. (2020).

These principles enhance the formation of communicative competence by integrating scientifically grounded approaches and practical methods, thereby preparing highly qualified specialists.

Communicative competence fundamentally involves the exchange of information, emotions, values, and knowledge between individuals to achieve mutual understanding and influence behavior. It encompasses a range of professionally important qualities that ensure effective interaction in professional settings. For teachers, these qualities include empathy, reflection, fairness, tact, sociability, and flexibility. In the context of pedagogical activity, these

communicative attributes are essential for effective engagement with students, parents, colleagues, and management. They enable teachers to organize productive communication aimed at education, upbringing, and socialization.

Functions of Communicative Competence in Pedagogical Activity:

1. Educational: Facilitates the transfer of knowledge and skills to students through effective communication.
2. Developmental: Supports the personal growth and development of students through communicative interactions.
3. Upbringing: Helps to form moral and ethical values and behavioral norms in students.
4. Regulatory: Establishes behavioral rules and norms within the educational environment.
5. Diagnostic: Identifies students' needs, interests, and difficulties through communicative interactions.

Thus, communicative competence for teachers is more than just a set of skills; it is a fundamental aspect of professional activity, crucial for effective educational and developmental work.

CONCLUSION

The study of communicative competence formation in future vocal disciplines teachers reveals the critical role of a structured, multi-component approach in achieving professional effectiveness. By identifying the key components of communicative competence—goal-oriented motivation, cognitive-linguistic elements, procedural-technological skills, and reflective-evaluative aspects—this research underscores the importance of each element in shaping competent and effective educators. The findings highlight that communicative competence is not a singular skill but a complex, interconnected system that requires careful development across various domains. Communicative competence emerges as a fundamental aspect of professional training for future vocal teachers. This competence is an integrative personal quality that facilitates pedagogical activity and is developed through the interplay of cognitive, emotional, and behavioral components. To effectively cultivate this competence, it is essential to establish an educational and artistic environment that promotes empathy, musical reflection, and communicative skills.

The results of this research have significant implications for teacher training programs, particularly in the field of vocal disciplines. By adopting a systematic and principle-based approach to developing communicative competence, educators can enhance their methodologies to better prepare future vocal teachers for the complexities of pedagogical communication. The integration of identified principles and components into training curricula will ensure that future educators possess the necessary skills to effectively engage, instruct, and inspire their students. Training elements such as performance activities and vocal preparation play a pivotal role in nurturing communicative qualities. They enhance public speaking skills, refine speech techniques, and improve self-presentation. Key aspects of a successful music educator's role include the ability to provide constructive feedback, engage effectively with students, and adapt to their diverse needs.

Thus, communicative competence is crucial for ensuring a high-quality pedagogical

process in music education. It fosters a supportive environment that encourages students' creative development and sustains effective interaction within the educational community. In conclusion, the formation of communicative competence among future vocal discipline teachers is a dynamic and ongoing process that requires a holistic and strategic approach. By embracing the principles and components outlined in this study, educational institutions can foster a new generation of vocal teachers who are not only skilled in their craft but also capable of meaningful and impactful communication. This, in turn, will contribute to the overall effectiveness and success of music education program.

REFERENCES

- Borovets, O. V. (2016). Formation of communicative competence of future educators in the process of professional training. *Innovations in Education*, 4, 82-89.
- Gusak, L. Y., & Smalko, L. Y. (2023). Formation of communicative competence in future teachers. Retrieved from <http://enpuir.npu.edu.ua/handle/123456789/41501>
- Haletskyi, S. (2019). Communicative competence of future foreign language teachers as a subject of scientific research. *Innovations in Education*, 9, 327-338.
- Haletskyi, S. (2020). Structure of communicative competence of future foreign language teachers. *Pedagogical Sciences: Theory, History, Innovative Technologies*, 5(6), 24-37.
- Kasyarum, K. (2019). Formation of communicative competence of future higher education teachers. *Collection of Scientific Works of Uman State Pedagogical University*, (1). <https://doi.org/10.31499/2307-4906.1.2011.188672>
- Kravecъ, R. A. (2023). Components of the professional competence of a foreign language teacher. *Current Issues and Prospects of Technological and Professional Education*, 15(1), 240.
- Merzheva, L., & Vruble, H. (2023). Formation of communicative competence as a component of the professional mastery of a music educator. *Scientific Bulletin of Melitopol State Pedagogical University. Series: Pedagogy*, 1(30), 80-85. <https://doi.org/10.33842/22195203-2023-30-80-85>
- Nanyvska, L. (2020). Structural-functional model of forming communicative competence of future officers of engineering troops: Analysis of results. *Pedagogical Sciences: Theory, History, Innovative Technologies*, 10(104), 177-188.
- Ostapenko, N. (2015). Competency approach in the professional training of the future music teacher. *Scientific Notes of Nizhyn State University Named After Mykola Gogol*, 2, 53-57.
- Shevchuk, S. S. (2017). Innovative aspects of the development of methodological competence of vocational school teachers in the system of postgraduate education. In *Collection of Scientific Articles. International Scientific-Practical Conference "Pedagogy. Theoretical and Practical Aspects of Modern Science Development"* (pp. 261-268). Warsaw: Sp. z o.o. Diamond Trading Tour.
- Shumska, L., Chyncheva, L., Dorokhina, L., Homenko, A., & Yotka, Y. (2024). Innovative vocal technologies in the educational choir of a higher education institution: A competency-based approach. *Multidisciplinary Reviews*, 7, 2024spe044. <https://doi.org/10.31893/multirev.2024spe044>
- Sypchenko, O., Haran, N., & Boiko, I. (2022). Communicative competence of the teacher as an important component of professionalism. *Humanization of the Educational Process*, 2(102), 26-35.
- Yotka, Y. (2021). Essence and content of vocal pedagogical activity. *Proceedings. Series „Psychological and Pedagogical Sciences” (Mykola Gogol Nizhyn State University)*, 3, 46-51. <https://doi.org/10.31654/2663-4902-2021-PP-3-46-51>