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DIAGNOSIS OF INTERNAL FACTORS IN THE DEVELOPMENT OF THE FOUNDATIONS OF FUTURE SPECIALISTS' PROFESSIONAL CULTURE

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Abstract. This article theoretically substantiates and empirically validates the structuring of factors influencing the development of the professional culture of future preschool teachers into two generalized groups: internal and external. The methodological toolkit employed in the study included the «Temperament Formula» test, the «Thinking Styles» assessment, an author-developed express test for evaluating the ingenuity of future preschool teachers, a chain associative experiment, and systematic pedagogical observation. The aggregated diagnostic results indicate a predominance of medium to sufficiently developed internal characteristics, while also identifying a subgroup of students with insufficiently developed subjective qualities, highlighting the need for targeted pedagogical support. The study concludes that the activation of internal factors – particularly individual psychological and subjective ones – is a key condition for forming the foundations of professional culture in future preschool teachers.

Key words: professional culture; developmental factors; future preschool teachers; individual psychological characteristics; subjectivity; ingenuity; communicative competence.

Introduction. The formation of the professional culture of future preschool education teachers is largely determined by the development of their internal characteristics, which constitute the foundation of professional readiness, resilience, and effectiveness of pedagogical activity. These characteristics determine the future educator's ability to adapt to contemporary educational conditions, engage in reflective practice, and select effective strategies for interaction with children, colleagues, and parents. In this context, the diagnosis of internal factors acquires particular significance, as it makes it possible to identify individual resources and potential areas for development among students.

An in-depth study of the internal factors of professional formation is also relevant because it is precisely these factors that shape the trajectory of personal and professional growth of future preschool education teachers. Awareness of one's own temperament, dominant thinking style, level of subjectivity, and communicative competence facilitates the mastery of effective professional strategies and the formation of conscious motivation for self-improvement. Diagnosing these characteristics allows for the timely identification of difficulties, adjustment of individual educational trajectories, and provision of targeted psychological and pedagogical support. Therefore, we believe that the study of internal factors in the development of professional culture is a necessary prerequisite for training a competitive, competent, and psychologically mature preschool education specialist.

Analysis of Recent Research and Publications. In psychological and pedagogical literature, the most widely recognized classification of factors is their division into external and internal ones. Researchers attribute psychological characteristics – such as motives, needs, and interests – to the group of internal factors. These characteristics occupy a significant place in the structure of personality, permeating its orientation, character, emotions, abilities, and mental processes. External factors, in turn, are understood as the conditions under which a particular activity takes place. Thus, in her studies of the professional identity of future specialists, O. Radzimovska classifies professional self-development and the emotional coloring of professional formation as internal factors, while the activation of professional development and involvement in practical activity are considered external factors (Radzimovs'ka, 2012: 10).

A different perspective on the classification of factors is presented by researchers Iryna and Ihor Androshchuk, who identified three groups of factors influencing the formation of pedagogical mastery in future teachers: socio-economic, personal, and technological. We agree with the scholars' view that socio-economic factors affect applicants at the stage of admission to higher education institutions, whereas personal and technological factors become decisive during the learning process within the chosen educational program (Androshchuk & Androshchuk, 2020: 32. doi: 10.32835/2707-3092.2020.21.29-34) (in Ukrainian).

Of particular importance to our study are the scientific works of A. Bazylenko, who, at the micro level, identified favorable factors of social activity among contemporary students. These include: “psychological attitudes, including those shaped by family traditions of active social engagement; a sense of belonging as a full-fledged member of the student group; positive personal experience; developed social abilities; a striving for self-realization, self-knowledge, and self-creation; a desire to experience personal value; awareness of positive resources and opportunities for their actualization; belief in one's own integrity; self-encouragement; well-developed perceptions of social activity; the ability to demonstrate initiative; and the ability for self-regulation” (Bazylénko, 2018: 9).

The purpose of the article is to present the results of diagnosing the internal factors influencing the development of the foundations of professional culture among future preschool education teachers.

Presentation of the Main Material. In our study, the factors contributing to the development of the professional culture of future preschool education teachers are divided into *two groups: internal and external*. Taking into account the scientific research outlined above, the factors influencing the development of the foundations of professional culture of future preschool education teachers were identified and characterized.

Thus, the first group includes the following *internal factors*:

- *Individual psychological factors*, such as temperament characteristics, personality traits, mental processes, individual thinking style, personal qualities, and general and special abilities of the learner, among others.
- *Subject-related factors*, which encompass the learner's ability to demonstrate ingenuity in overcoming life contradictions and challenges; to construct a personal model of interaction with the world; to transform oneself and the surrounding environment through practical and theoretical activity; and to achieve set goals of professional and personal growth. This group also includes communicative competence, understood as the future preschool teacher's ability to establish effective communication with participants in the educational process based on humanistic principles.

The second group comprises the following *external factors* identified in the study:

- *Educational factors*, including the organization and improvement of a reflective educational environment aimed at forming general and professional competencies of future preschool education teachers.
- *Social factors*, such as the ability to build one's own model of relationships with others – children, colleagues, and parents – as well as leadership tendencies and organizational skills.

- *Sociocultural factors*, which involve the influence of culture, education, politics, and the information environment on the selection and achievement of life goals, the assimilation of transcendental values, and the realization of professional and personal qualities and strategies in future pedagogical activity (Hal'chenko, 2024).

To diagnose *individual psychological factors* – one of the key constructs of which is temperament – the “Temperament Formula” test (adapted by U. Mykhailyshyn) was selected, along with systematic observation of students during the educational process and extracurricular activities. To assess individual thinking styles, the “Thinking Styles” test developed by R. Bremson and A. Harrison was employed.

To diagnose subject-related factors, particularly the ingenuity of future preschool education teachers as an indicator of their subjectivity, an express test titled *Ingenuity of Future Preschool Education Teachers as the Most Vivid Manifestation of Creativity* (authored by V. Halchenko) was developed. Observation of students during educational and extracurricular activities was also applied. To assess communicative competence as another subject-related factor, a chain associative experiment was conducted.

The diagnosis of the individual psychological internal factor contributing to the development of the foundations of professional culture among future preschool education teachers made it possible to determine the role of temperament in professional culture development. The “Temperament Formula” test (adapted by U. Mykhailyshyn) was administered for this purpose. Respondents from both the experimental and control groups identified their dominant temperament type and, using the temperament formula, determined the role of other temperament types that are also present in each individual but to a lesser extent. Based on self-analysis, each future preschool education teacher became aware of how various characteristics of the dominant temperament type can be applied in future professional activity—for establishing relationships with children, parents, and colleagues; achieving set goals; creating new projects; overcoming difficulties; and regulating destructive emotions.

We also consider it important that students realized the possibility of restraining or transforming negative manifestations of temperament through personal qualities – such as aggressiveness in choleric individuals, impulsiveness in sanguine individuals, excessive sensitivity in melancholic individuals, and outward indifference in phlegmatic individuals.

We believe that awareness of one’s temperament type will serve as a stimulus for determining one’s individual thinking style. As a diagnostic tool for identifying individual thinking style – considered the next construct within the individual psychological factors influencing the development of the foundations of professional culture of future preschool education teachers – we selected the “Thinking Styles” methodology (an adapted version of the well-known InQ questionnaire developed by R. Bremson and A. Harrison in 1984) (Harrison & Bramson, 1984).

The results of diagnosing students are presented in Figure 1.

Figure 1 shows that the majority of respondents demonstrate an idealistic thinking style. Such participants are characterized by a heightened interest in human values, moral issues, goals, and needs. They are able to take subjective and social factors into account when making decisions, tend to smooth out contradictions, and are inclined toward intuitive and holistic judgments without engaging in detailed problem analysis. We believe that this thinking style will stimulate the development of spiritual and value-based orientations of future preschool education teachers.

Students with a pragmatic thinking style accounted for 24.12% of the respondents. These individuals rely on their own experience, use readily available materials and information, and strive to obtain practical results as quickly as possible. They demonstrate a keen sense of situational awareness, successfully choose appropriate behavioral tactics, and exhibit flexibility and adaptability. In our view, such future specialists are more likely to develop coping strategies of impulsive behavior as a component of the conative-instrumental component of professional culture.

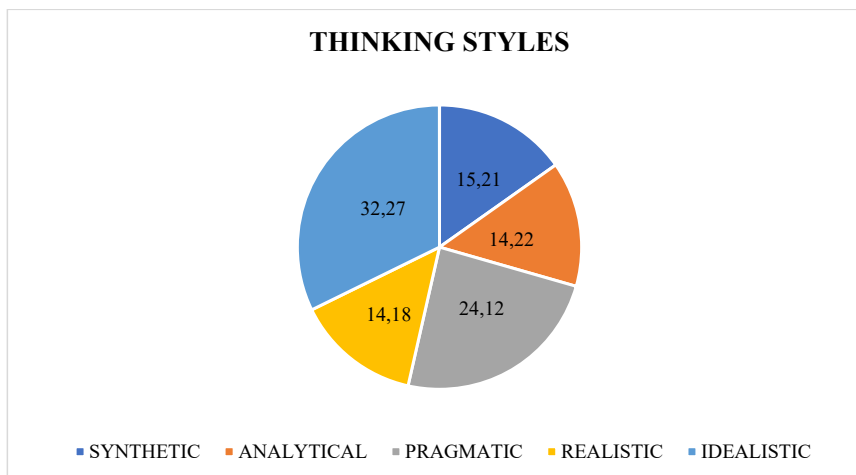


Fig. 1. Results of a study of the thinking styles of future preschool teachers

Future preschool education teachers with a synthetic thinking style, who constituted 15.21% of the sample, are capable of creating something new and original by combining dissimilar viewpoints and ideas. They tend to conduct mental experiments, formulate theories and personal conclusions, and favor change for its own sake. We assume that this thinking style will activate the life-creative potential as one of the foundations of the professional culture of future preschool education teachers.

Respondents with an analytical thinking style (14.22%) are inclined toward a logical and thorough approach to problem solving. Before making decisions, they develop step-by-step plans and attempt to collect as much information and supporting evidence as possible. They perceive the world as rational, structured, and predictable. We assume that this thinking style will contribute to a more thorough acquisition of the knowledge necessary for future professional activity, thereby stimulating the cognitive component of the emotional-cognitive component of the professional culture of future specialists.

The smallest proportion of respondents (14.18%) demonstrated a realistic thinking style. These individuals are focused exclusively on recognizing facts; from their perspective, only that which can be directly perceived through the senses is considered “real.” For such students, a problem arises when they see and understand that something is incorrect, in which case they attempt to correct it immediately. In our opinion, this thinking style will be particularly beneficial for future preschool education teachers in the process of direct interaction with young children, especially in facilitating the development of children’s sensory-perceptual skills.

Thus, identifying the dominant thinking style, as well as temperament type, enabled students to better understand how they can achieve their goals and how to act in solving tasks related to their future professional activity. Taking into account the results of the study, we are firmly convinced that the activation of individual psychological factors has a positive impact on the development of the foundations of professional culture of future preschool education teachers (Hal’chenko, 2022).

The results of diagnosing the next group of internal factors influencing the development of the foundations of professional culture – namely, subject-related factors, with ingenuity of the future educator as the central construct – proved to be particularly interesting. It was found that only 23.43% of respondents demonstrated a high level of ingenuity in both educational and professional activities as well as in personal life. Such individuals are capable of life creation; they can prevent personal disharmony, maintain balance between the external and internal worlds, make free choices, independently take decisions and assume responsibility, design their own life projects, restructure their lives for the better, and continuously engage in self-improvement and self-realization.

The Ingenuity of Future Preschool Teachers

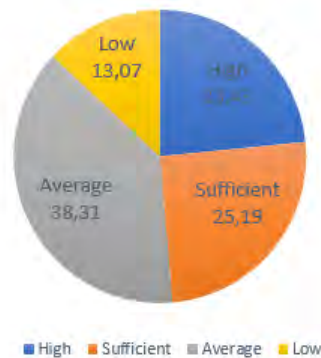


Fig. 2. Research on ingenuity as an internal (subjective) factor in the development of the foundations of professional culture of future preschool educators

Figure 2 shows that 23.43% of respondents demonstrated a high level of ingenuity. The characteristics of the high level were described above. A sufficient level was identified in 25.19% of students. These individuals are characterized by the ability to demonstrate ingenuity periodically, make independent decisions, and design life projects. Future educators with a medium level are occasionally capable of demonstrating ingenuity; however, they experience difficulties in assuming responsibility, planning, and creating new projects, while manifestations of striving for self-improvement are intermittent. Respondents with a average level accounted for 38.31%. As for the low level of ingenuity, 13.07% of students were identified. Such future educators are characterized by isolated manifestations of ingenuity in the educational process, an inability to make responsible decisions, a lack of motivation to create new projects, adherence to a fixed life scenario, and frequent manifestations of disharmony and aggression.

Thus, it should be noted that the majority of respondents demonstrated sufficient and medium levels of ingenuity; however, a group of students with a low level of ingenuity was also identified, who particularly require teacher support. Such students experience difficulties studying in the conditions of a rapidly changing reality that demands flexibility, mobility, independence, and creativity. We believe that the comprehensive psychological program developed by us will contribute to increasing their level of ingenuity, which, in turn, will activate life-creative potential as one of the foundations for the development of the professional culture of future preschool education teachers (Hal'chenko, 2022).

An important subject-related factor in the development of the foundations of professional culture of future preschool education teachers is *communicative competence*. Effective work of a preschool educator is impossible without speech activity, through which dialogical communication with children based on humanistic principles is carried out. Therefore, an associative experiment was conducted to study future preschool educators' understanding of the essence of the concept "communicative competence" and its role in their future professional activity. A chain associative experiment (theoretically substantiated in the previous subsection) was applied. Within 10 minutes, students were asked to write definition-associations to the concept "communicative competence of a future preschool educator."

The analysis of stimuli was carried out in the following aspects: conceptual, emotional-motivational, and behavioral. Psycholinguistic analysis of the conceptual aspect revealed significant differences in the production of definition-associations between second-year and fourth-year students. In response to the verbal stimulus "communicative competence of a future preschool educator," second-year students reacted as follows: 65% produced from one to three verbal reactions, while

35% produced up to five reactions. The nuclear reactions of the associative field included communication, interaction, and contact. Identification of this concept with professional activity was observed in linguistic consciousness, as evidenced by such recorded expressions as “communication with children,” “interaction with pupils,” and “contact with parents.”

The diagnostic results of fourth-year students differed significantly from those of second-year students due to their greater professional training experience. In response to the same stimulus, 45% of fourth-year students produced from one to five verbal reactions, while 55% produced more than five reactions. Their associative responses included such nuclear reactions as dialogue, professionalism, mutual understanding, empathy, and social perception. These reactions indicate a deeper awareness among fourth-year students of the key components of communicative competence, as well as the informational and emotional-motivational content of this concept.

Examples of interpretations of the concept “communicative competence of a future preschool educator” provided by second-year bachelor’s students show that they understand it primarily as the ability to establish contacts with other people (in the professional context – with children, parents, and colleagues). In contrast, definitions provided by fourth-year students reflect a more comprehensive and complex understanding of the concept. They interpret communicative competence as the ability to interact with others based on understanding, dialogue, empathetic attitude, recognition of personality as the highest value, and the use of acquired professional knowledge, skills, abilities, and speech culture.

Thus, for fourth-year respondents, the emotional-motivational aspect became the leading factor in understanding the concept of communicative competence, unlike second-year students, for whom the conceptual component predominated. It was also found that senior students, unlike second-year students, interpret communicative competence by revealing perceptual-reflexive and behavioral aspects. In their view, “communicative competence is the ability of an individual to understand the inner world of another person and improve one’s own, thereby enhancing interpersonal interaction.” Therefore, we consider it appropriate to include perceptual-reflexive and behavioral components in the structure of the associative field of the stimulus “communicative competence of a future preschool educator.”

The analysis of scientific literature and the conducted experimental study demonstrated that students of different academic years understand the concept of communicative competence differently. Significant differences were also identified in the nuclear reactions of their associative fields to the stimulus “communicative competence.” From a psycholinguistic perspective, the process of understanding speech in general and the essence of concepts in particular occurs differently across groups of individuals, depending on their prior experience (Hal’chenko, 2022).

In particular, similar views are expressed by Chinese researchers from Beijing Normal University – Zhang Xiaohong, Zaizhu Han, and Yanchao Bi – who argue that sensory experience is a key factor for concrete concepts, while linguistic contexts play a crucial role in abstract concepts. According to the scholars, concrete concepts contain more perceptual features, whereas abstract concepts contain more functional ones (Zhang, Han, & Bi, 2013: 1060. doi:10.1017/S0142716412000124 (in Ukrainian).

The validity of our research findings is confirmed by numerous studies conducted by contemporary and earlier psychologists and psycholinguists. Mechanisms of speech perception, comprehension, and production have been studied by both domestic and international scholars (O. Zahorodnia, O. Kornieieva, H. Lysenko, T. Nedashkivska, among others). According to researchers, speech perception is the process of establishing meaning hidden behind the external form of utterances. This process occurs at two levels: first as perception itself, and subsequently as comprehension of the speech message (Nedashkivska, & Zahorodnia, 2015).

Further confirmation is found in the works of T. Nedashkivska (2015), who, through lexical and terminological analysis, identified the following components of the semantic core: action, activity, ability to perform activity, implementation, result, behavior, behavioral standards, skills, knowledge, abilities, structure, experience, qualification, contacts, values, evaluation, range of issues, capabili-

ties, readiness, individual qualities and properties, specific tasks, professional functions, state, quality, property, spiritual, mental, and physical correspondence (Nedashkivska, & Zahorodnia, 2015: 44).

Contemporary researchers such as T. Sharavara, A. Kotsur, N. Syzonenko, and Ya. Tahiltseva include value-motivational, logical-conceptual, and emotional-affective domains in the structure of the associative field of the stimulus “competence.” Experimental results indicate the dominance of the cognitive level of mental representations over the emotional one, as well as a relative balance between logical-conceptual and value-motivational domains (Sharavara, Kotsur, Syzonenko, & Tahiltseva, 2018: 351).

The use of a free associative experiment made it possible to record verbal reactions in the linguistic consciousness of future preschool educators that reflect their understanding of the essence of the concept “communicative competence of a future preschool educator” as an important indicator of professional culture. The nuclear reactions of fourth-year students were significantly richer in content than those of second-year students. The associative field structure included conceptual, emotional-motivational, perceptual-reflexive, and behavioral domains, with the latter two manifested only among senior students. A significant achievement of the study is the identification of the dominance of the emotional-motivational aspect combined with the perceptual-reflexive one in the linguistic consciousness of senior students, which constitutes an essential component of professional culture development.

Thus, communicative competence is one of the key professional skills of a future preschool education teacher. It involves the ability to establish dialogical, humanistically oriented communication with children, parents, and colleagues, understand the inner world of another person, and reveal one’s own through mastering social perception skills. Considering the above, we are convinced that activating subject-related factors significantly enhances the development of the foundations of professional culture.

Conclusions. The conducted study enabled a systematic analysis of the structure and content of internal factors determining the level of formation of the foundations of professional culture among future preschool education teachers. It was established that individual psychological characteristics (temperament, character traits, thinking style, cognitive processes) and subject-related characteristics (ingenuity, communicative competence, capacity for self-regulation and reflection) serve as key prerequisites for professional growth and effective pedagogical activity. A differentiated analysis of diagnostic results revealed heterogeneity in the levels of development of these factors among students, indicating the need for targeted individualization of educational influence.

The obtained empirical data confirmed the importance of timely identification of internal resources and potential limitations of future educators. This provides a basis for developing psychological and pedagogical interventions aimed at activating their personal and professional development. The proposed set of psychodiagnostic methods proved effective in identifying individual developmental trajectories and outlining directions for further work on enhancing the foundations of professional culture. Therefore, the study of internal factors has proven to be an important tool for improving the quality of training of future preschool education teachers, contributing to the formation of psychologically mature, competent, and creatively active professionals.

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