INVOLVEMENT OF FUTURE TEACHERS IN THE LEARNING PROCESS AS A DETERMINANT OF INFLUENCE ON THE ORIENTATION OF THEIR PROFESSIONAL THINKING IN PEDAGOGICAL ACTIVITIES

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Abstract: The article presents the theoretical and experimental results of research on the involvement of future teachers in educational work and the involvement of teachers in professional work, as well as research on the impact of involvement on the direction of professional thinking in pedagogical activity. As a result of the analysis of scientific sources, the essence of involvement was revealed as a complex entity, the components of which are behavioral, emotional, and cognitive involvement. The essence of involvement in work is considered in relation to involvement in educational work (involvement) and involvement in professional work (engagement). Negative attitude towards work, unfavorable functioning at the workplace, exhaustion is characterized as emotional and cognitive burnout. The experimental part of the work was aimed at researching the involvement of future teachers in educational work and establishing the factors influencing direction of professional thinking of future teachers in three areas: 1) behavioral involvement; 2) emotional involvement; 3) cognitive involvement. With regard to teachers who are already working, two groups of factors are distinguished: 1) factors of positive influence on professional thinking as a higher cognitive process of searching, identifying and creatively solving problems in the process of pedagogical activity; 2) factors of negative impact on professional thinking as a higher cognitive process of finding, identifying, and creatively solving problems in the process of pedagogical activity.

Keywords: involvement; involvement in educational work; engagement in professional work; professional thinking; graduate students; teachers; martial law.

1 Introduction

Emphasis on the development of professional thinking is not made by chance, but due to the fact that thinking as a higher cognitive mental process ensures mastery of new knowledge based on creative reflection and transformation of reality, which encompasses the field of professional activity. Understanding the essence of professional thinking is determined, on the one hand, by the peculiarities of professional activity, and, on the other hand, by constant development, which occurs both during the period of learning professional activity and during the period of its active performance.

According to the generalizations of T. Hura [17], the interpretation of the concept of "professional thinking" is characterized by variability. Professional thinking is competent, specifically professional thinking aimed at solving tasks of professional activity; a hierarchical chain of thought processes that correspond to the purpose of professional activity; a higher cognitive process of finding, identifying, and creatively solving problems in the process of professional activity.

The practical nature of professional thinking is determined by two levels of functioning [17]:

1. Situational level – related to the specialist's identification of the causes of the contradiction and ways to eliminate and overcome it. The changes that occur in the subject in the process of solving the problem situation are mainly related to the reconstruction of the methods of professional activity. This level is determined by the situational motivation of the individual and by the influence of certain conditions of professional activity.

2. The supra-situational level – is determined by the specialist's awareness of the need to change and improve certain features of his own personality, which is manifested in the search for means of purposeful formation of own professionally significant and personal qualities.

The success of a specialist's professional thinking depends on understanding:

- Of external factors that determine the content of professional activity and direct ways of solving various professional problems;
- Of personal, internal factors that determine individual psychological properties and peculiarities of the functioning of the intellectual sphere;
- Of general and special patterns of thinking that correspond to the main determinants that are embedded in the content and structure of professional activity.

2 Method

The period of study at an institution of higher pedagogical education contributes to the development of professional thinking of future teachers, in particular, determines its orientation. Accordingly, the task of our research was aimed at summarizing data on:

- The component structure of the "engagement" phenomenon;
- Peculiarities of involvement in the work of educational and professional content;
- The impact of burnout on work engagement and on the focus of professional thinking.

The experimental part of the work was aimed at researching the involvement of future teachers in educational work and establishing factors influencing the direction of professional thinking of future teachers in three vectors:

1) behavioral involvement;
2) emotional involvement;
3) cognitive involvement.

With regard to teachers who are already working, the experimental part of the study was aimed at identifying the components of two groups of factors, namely:

1. Factors of positive influence on professional thinking as a higher cognitive process of searching, identifying, and creatively solving problems in the process of pedagogical activity;
2. Factors that have a negative impact on professional thinking as a higher cognitive process of searching, identifying, and creatively solving problems in the process of pedagogical activity.

3 Results and Discussion

The component structure of the "engagement" phenomenon

The involvement of future teachers in the learning process in a higher education institution directly determines the effectiveness of educational activity and indirectly - the effectiveness of pedagogical activity through the system of acquired knowledge and skills that form the basis for thinking aimed at solving the tasks of professional activity.

In scientific works, "engagement" is analyzed as a complex phenomenon, which includes three components:

1. Behavioral involvement – refers to participation in work, includes involvement in various types of activities (academic, social, etc.), plays a key role in the process of achieving positive

academic results, is considered as a preventive measure for dropping out while studying in educational institutions.

Manifestations of behavioral involvement: performance of work; compliance with the rules and norms of education, communication, performance of activities; independent work, participation in discussion, asking questions; cooperation with others; participation in various activities (E. Buhs, G. Ladd [11]).

2. Emotional involvement – includes positive and negative reactions to participants the learning process (teachers, lecturers, pupils, students) and to a specific educational institution as a whole (school, college, institute, university); determines the nature of relations with the participants of the learning process and with a specific institution; affects readiness to perform work.

Manifestations of emotional involvement: affective reaction to the institution (sympathy, evaluation of the work of the educational institution (Y. Lee et al. [18]); self-identification ('price for me', belonging to a certain community) (Y. Lee et al. [18]); affective reactions to the learning process (interest, boredom, happiness, sadness, anxiety) (J. Connell, J. Wellborn [12]).

3. Cognitive involvement includes motivation, mental effort, and the use of various strategies, based on the idea of investment (understanding the value of work for the formation of mastery, the desire to get a good grade, the desire to look smart, the desire to be productive) (C. Wolters, S. Yu, R. Pintrich [33]), implemented on the basis of thoughtfulness; it implies a willingness to make efforts necessary to understand complex ideas and master new knowledge and skills.

Manifestations are as follows: simple memorization; deep understanding and acquisition of experience based on the use of self-regulated learning strategies; fulfillment beyond requirements; perseverance in overcoming difficulties (J. Connell, J. Wellborn [12]); the use of metacognitive strategies for planning, monitoring, and evaluating one's knowledge while performing tasks (R. Pintrich, E. De Groot [24]); strategies for managing efforts (regulating attention, showing persistence, establishing a connection between new information and existing knowledge, actively monitoring understanding (repeating complex material); strategies for seeking help (formulating a request for clarification, using analogies) or avoiding efforts (skipping difficult parts of the material) (R. Miller, B. Greene, G. Montalvo, B. Ravindran, J. Nichols [22]).

According to Bakker and van Woerkom [7], as well as Wang, Ren and Liu [32], the term "engagement" has significant potential as a multidimensional construct that combines three components of engagement (behavioral, emotional, cognitive), which are dynamically interconnected within the individual (pupil or student).

Involvement can be characterized by:

- Directions (social, academic);
- Intensity (moderate, productive, intense);
- Duration (short-term (depending on the situation) and long-term or stable);
- Type of efforts (behavioral efforts, mental efforts, efforts to fulfill behavioral expectations);
- A source of emotions (community, environment, content, process, result).

Peculiarities of involvement in the work of educational and professional content

A. Bakker, W. Schaufeli, M. Leiter, and T. Taris [6] explain work engagement as a state of mind characterized by energy, dedication, and absorption, which is also supported by the works of other authors (W. Schaufeli, B. Bakker [29]). Engagement at work requires not only a high level of energy, but also mental stability during work, a willingness to put effort into one's work and to persevere in the face of difficulties. Involvement in work is characterized by a high level of energy and a high identification with one's work.

A. Bakker, W. Schaufeli, M. Leiter and T. Taris [6] characterize work involvement as: positive satisfaction and affective-motivational state of well-being related to work; a unique concept that is best predicted by job resources (e.g., autonomy, supervisory coaching, performance feedback) and personal resources (e.g., optimism, self-efficacy, self-esteem).

K. Salmela-Aro, S. Read [26] identified four profiles of student involvement in learning and emotional burnout (i.e., fatigue, cynicism, inadequacy) in higher education:

- "Engaged" (44%) – involved students had the most positive involvement, which was accompanied by the least symptoms of burnout compared to other groups;
- "Engaged-exhausted" (30%) – exhausted students felt emotional exhaustion at the same time as academic activity;
- Inefficacious (19%) – the inefficacious group had heightened experience of inadequacy as a student;
- "Burned-out" (7%) – burned out students demonstrated very high cynicism and inadequacy and very low academic activity compared to other groups.

Inefficacious and burned-out students had higher demands and fewer resources than engaged and engaged-exhausted students. Also, ineffective and burned-out students had more depressive symptoms compared to engaged students.

Engaged students tended to be observed in the early stages of higher education, while the burned-out students and ineffective were observed in the later stages of their studies [26].

The results of the study by Salmela-Aro et al. [27] showed that a high level of involvement in academic work at the university predicted a high level of involvement in professional work and a low level of burnout after 10, 14, and 17 years. Conversely, high levels of task avoidance in university predict low levels of work engagement and high levels of early career burnout.

K. Alexander, D. Entwisle, C. Horsey [1] pointed out that the effectiveness of engagement is influenced by the influence of the family context (the presence of stressful changes in the family), personal resources of students (attitudes and behavior) and acquired experience during the period of schooling.

Involvement in educational work has a continuation in involvement in professional work. A. Bakker [2] examines daily fluctuations in work engagement. The scientist explains the fluctuations by the dynamics of everyday work and changes in personal resources. On days when employees have access to many resources, they may be well engaged in their professional work, coping with their daily work factors (e.g., work pressure, negative events), and are likely to interpret these factors as problems. On days when employees have a sufficient level of control over their work, they actively seek to optimize their work environment to stay engaged. This proactive behavior is called job creation and involves immediate and daily engagement with work. Daily engagement is inversely related to daily recovery. On days when employees recover well, they feel more engaged, and activity throughout the day predicts further growth.

According to I. Beltrán-Martín et al. [9], in highly productive work systems, involvement in professional work is ensured through psychological conditions: significance, psychological safety, accessibility.

W. Schaufeli, W. Van Rhenen [28] found that employees involved in work experience positive emotions compared to those who are not involved. They also feel more inspired, energetic, cheerful and full of enthusiasm.

Rodríguez-Muñoz et al. [25] found that home-based employees were happier on days when they felt highly engaged at work.

According to the results of research by B. Fredrickson [15], busy workers show greater openness to new experiences, actively explore the environment, become inclined to creative work.

The impact of burnout on work engagement and the orientation of professional thinking

C. Maslach, W. Schaufeli, M. Leiter [20] explain burnout as a state of mind associated with work engagement. According to A. Bakker, E. Demerouti, A. Sanz-Vergel [4], burnout is a syndrome consisting mainly of chronic exhaustion and a negative attitude to work, which implies unfavorable functioning at the workplace.

Burnout is characterized by low energy and low self-identification with the work to be done. Two dimensions are implied here:

1. Emotional burnout – observed in the presence of exhaustion, which shows a strong correlation with depression (including anhedonia and depressed mood) [10].
2. Cognitive burnout – characterized by cynicism and loss of professional efficiency (C. Maslach, W. Schaufeli, M. Leiter [20]).

A. Bakker, E. Demerouti, A. Sanz-Vergel [5] established the following relationships between burnout and work engagement: burnout is more closely related to health consequences, and work engagement is more closely related to motivational results.

According to S. Sonnentag [30], engagement can fluctuate, similar to fluctuations in labor productivity during the day. The nature of the task at hand can be an important factor in determining whether or not a person feels engaged at work.

N. Dimotakis and R. Ilies [14] draw attention to the transition to instant burnout depending on the specifics of involvement in work, in particular, on the content of the assigned task, the contingent of people with whom the task needs to be performed.

The work of M. Bask, K. Salmela-Aro [8] deals with the development of school burnout. Scientists studied three components of this process: 1) cynical attitude towards school; 2) feeling of inadequacy in behavior; 3) fatigue. According to the results of the study, it was recorded that a student with a high level of cynicism or a sense of inadequacy is most likely to drop out, while a student who scores low on these two components is most likely to continue studying. An increase in the indicators of all three components over time in relation to students of the academic direction was also established.

A. Bakker and P. Costa [3] found that employees with a high level of burnout need help in structurally changing working conditions and improving their health.

In the research of E. Garrosa, L. Blanco-Donoso, J. Moreno-Jiménez [16], a conclusion was made about daily emotional exhaustion. According to the results of a study by scientists, the loss of energy by employees is influenced by role stress and impoliteness at work. Daily optimism and recovery (relaxation and psychological detachment from work during non-working hours) contribute to increasing the energy of employees, reducing emotional exhaustion, and mitigating the negative impact of role stress.

The effectiveness of involvement in work is influenced by the following personal factors: emotional stability, conscientiousness, extraversion (A. Mäkikangas, T. Feldt, U. Kinnunen, S. Mauno [19]); self-efficacy, optimism, self-esteem [34].

P. Costa and R. McCrae [13] pay attention to the tendency of extroverts to positively reassess problems, which will help them perceive work requirements as challenges.

The experimental part of the research was conducted under the conditions of the introduction of martial law on the territory of Ukraine. The research covered 126 primary school teachers and 726 master's students who studied in the "Elementary Education" specialty at Borys Grinchenko Kyiv University, Ivan Franko National University of Lviv, and Volodymyr Vynnychenko Central Ukrainian State Pedagogical University on full-time and part-time basis.

In order to research the involvement of future teachers in educational work and to determine the influencing factors on the direction of professional thinking of future teachers in three areas ((1) behavioral involvement; (2) emotional involvement; (3) cognitive involvement), a student questionnaire was applied. After processing questionnaires, influencing factors related to behavioral, emotional, and cognitive involvement were identified. Next, we present the generalized data.

Behavioral involvement is influenced by the following:

▪   Content of the academic discipline – the academic discipline has a structured content that is convenient and easy to work with;
▪   Organization of the educational process – flexible organization of distance learning in the realities of war; clear organization of the educational process, all tasks are scheduled, deadlines are defined, which help to orientate in time; learning does not occupy the entire life space, but complements work and rest; there is enough time to familiarize self with the material and complete tasks;
▪   The content of educational information is new, interesting, modern, relevant for me as a teacher, accessible for perception, sufficient in volume, diverse and allows for a wider acquaintance with the topic; constant access is provided to be able to return to the information if necessary and repeat it; useful and will be useful in the future; the information can be used in the future for own professional growth; I receive invaluable, useful information for my future profession and personal development;
▪   Features of teaching – clear and structured teaching is organized using innovative methods, the latest technologies, modern teaching tools (presentations, mind maps, video lectures), various educational platforms; emphasis is placed on theoretical material and on the formation of practical skills; taking time to answer students' questions; presentation is clear and understandable; the material is presented in an accessible form, supported by examples from life, my needs and wishes are taken into account; the teacher helps to understand a complex topic and answers students' questions; there is an opportunity to explore new ideas and interact with interlocutors; students in the group are interested in what is taught and can discuss the topic during and after classes; practical examples are presented that help to understand the theory and apply it in practice; the material is taught in an accessible and interesting way, using various methods and examples; there is an opportunity to question what is unclear; the lecturer explains the theoretical or practical material by demonstrating it and explaining it in simpler words than in the task; teaching is interactive and interesting, changing types of activities; correctly organized learning and there is a connection with life, a clear structure of the presentation with specific tasks to be performed; organizing discussions from which I get the most knowledge; teaching combines the theoretical part with the practical part, based on real events; not a very fast pace of teaching; the lecturer presents the material in an interesting way; visualization of the main educational material, use of tables, highlighting in different colors; the lecturer helps me understand the material, creates a positive atmosphere for studying, helps me feel comfortable and motivated to study; ensuring the student's understanding of the purpose of study, methods of applying knowledge and skills in professional activities; teaching is conducted in comfortable conditions; the possibility of studying at a convenient time (asynchronously, not during work);

- The content of the tasks and the specifics of their implementation – the tasks are of a practical or applied nature, which allows to better remember information and consolidate skills; tasks have a clear explanation for execution; the content of the tasks to be performed is clear; tasks do not take much time; I understand what I have to do; interesting task content; I complete all tasks on time and with high quality and get the highest marks; I understand what task I have to do and in what time; the lecturer's support can help me understand the material, give me additional motivation and the feeling that I am not alone in my learning process; the task does not take much time; I receive assignments that allow me to develop and explore new issues;
- The result of training – everything is successful and everything is clear; I see the result of this training; understood the material I am studying and can use this knowledge in professional activities; well-deserved evaluations for works on which she spent a lot of time and effort; I understand that I need this knowledge; skills and knowledge helped me develop myself, raise my professional level, solve employment issues, solve professional problems; when I see the result of my studies, i.e., by completing tasks (in the form of tests or answering questions, for example) and receiving points for them.

Emotional involvement is affected by:

- Affective reactions to training in war conditions – a day with worries and sad news; there is no internet or electricity during training;
- Affective reactions to the learning process – a sense of satisfaction, time spent with benefit (at the end of the pair, I understand that I did not waste my time and gained thorough knowledge that I can use in my work);
- Affective reactions to the lecturer's personality – I like how the lecturer teaches; has a pleasant voice; my mood is influenced by the lecturer's mood; when the person who teaches causes pleasant emotions in me; I do not feel any obstacles when communicating with the lecturer; a pleasant and calm emotional state in the dialogue; feeling of support, mutual understanding and comfortable communication; communication with the lecturer brings pleasure; education is built on the principle of "mutual understanding", the lecturer understands the conditions of students' education during the war; I receive support from the lecturer;
- Affective reactions to the students of the group – I find common cognitive interests with my group mates; I feel ease in communicating both with classmates and lecturers;
- Affective reactions to the learning environment – a comfortable environment in which I am: well-ventilated, bright, soft chair, large screen for better perception; the lecturer creates a comfortable atmosphere in the class; a physical state of comfort and respect, when the team (group) in which I study is pleasant.

Cognitive involvement is affected by:

- Level of mental load – mental load corresponds to my capabilities; no overload; the learning process takes place without excessive load; no task overload; there is no need to combine studies with work, and I can fully focus on studies;
- Conditions for concentration – silence all around so as not to be distracted; nothing interferes with concentration and promotes successful learning of the material;
- Investing in myself – learning helps me develop my talents and abilities, supplement my knowledge and allow becoming more competent and successful; I know it will be useful for me; understanding the practical need for knowledge; explore the world and expand my knowledge; I study really important and interesting material; I am engaged in what is interesting and important to me, I understand and feel that the acquired knowledge or skills will be useful to me in my work; information really carries

a cognitive context for me; learn from a professional in his field, well-versed in the topics he teaches; communicating with a teacher who inspires and provides support, you always want to challenge yourself; for me personally, this is work and encouraging myself for success, fighting laziness, proper self-organization of my work; I understand that I need this training, it is useful and will have a productive result; the educational material matches my interests; when I study for myself, and not for the sake of points/grades; when I succeed in everything, I understand everything, I get good grades, I present the prepared material and the teacher highly appreciates it; I am interested in the subject or topic I am studying, then I will be more motivated and involved in learning; the material I study is interesting and stimulating for my development; feel that I am learning something useful and interesting, then I will be more motivated to study the material and achieve better results; learning is in line with my interests.

The analysis of data from primary school teachers' questionnaires contributed to the identification of two groups of factors:

1. Factors of positive influence on professional thinking as a higher cognitive process of searching, identifying, and creatively solving problems in the process of pedagogical activity:

- Educational factors – level of knowledge and skills; my competence; the opportunity to use my strengths; appeal of what was particularly successful during studies at an institution of higher pedagogical education;
- Subject factors – people with whom there was positive contact during the day; harmonious relationships in the family; general creative mood in the team; positive evaluation of my activity; friendly attitude of colleagues; successful learning of students.
- Production factors – possible volume of load; the optimal time for which the work needs to be done; clearly planned work schedule; strong mental load; performance of the day, achievements; change of activities during the day; positive events that happened during the day.
- Personal factors – my mood; health and well-being; physiological needs are met (healthy sleep, food, sufficient rest).

2. Factors of negative impact on professional thinking as a higher cognitive process of finding, identifying, and creatively solving problems in the process of pedagogical activity:

- External factors – events in the war.
- Subjective factors – negative information, news, conversations, emotions of others; stressful situations; problems in family relationships; general anxious mood in the team; behavior of students and colleagues that causes negative thoughts; conflict situations.
- Production factors – excessive workload; insufficient amount of time to perform work; fatigue from work and study; congested work schedule; a busy day, intense mental workload; a significant amount of work to be done; low productivity of the day; the same type of activity during the day; negative events that happened during the day and the situations I get into.
- Natural factors – state of the atmosphere; weather.
- Domestic factors – problems in everyday life, something broke.

4 Conclusion

Professional thinking ensures the fulfillment of the tasks of professional activity, it is most clearly manifested as a cognitive process of searching, identifying and creatively solving problems in the process of professional activity (T. Hura). Professional thinking is intensively formed during the period of study at a higher education institution based on active involvement in the learning process.

Involvement is a complex formation that has a component composition (behavioral involvement, emotional involvement, cognitive involvement), characterized by: directions (social, academic); intensity (moderate, productive, intense); duration (short-term (depending on the situation) and long-term or stable); type of effort (behavioral effort, mental effort, effort to fulfill behavioral expectations); a source of emotions (community, environment, content, process, result).

The phenomenon of "work engagement" refers to the working state of mind (A. Bakker, W. Schaufeli, M. Leiter and T. Taris), characterized by energy, dedication and absorption (W. Schaufeli, A. Bakker). In relation to students, involvement in educational work is characterized by four profiles: engaged, engaged-exhausted, inefficacious, burned-out (K. Salmela-Aro, S. Read).

Involvement in professional work is characterized by daily fluctuations (A. Bakker), affecting the emotional sphere. Negative attitude to work, unfavorable functioning at the workplace, exhaustion is explained as burnout (emotional, cognitive).

As a result of the study, it was established that the involvement of future teachers in educational work is a determinant of the impact on the orientation of their professional thinking. According to the results of the study, it was established that the influence on the direction of professional thinking of future teachers takes place in three directions:

1. Behavioral involvement – factors of influence: the content of the educational discipline; organization of the educational process; content of educational information; peculiarities of teaching; content of tasks and features of their implementation; learning outcome.
2. Emotional involvement – factors of influence: affective reactions to training in war conditions; affective reactions to the learning process; affective reactions to the lecturer's personality; affective reactions to the students of the group; affective reactions to the learning environment.
3. Cognitive involvement – influencing factors: level of mental workload; conditions for concentration; investment in self.

Regarding teachers who are already working, two groups of factors are distinguished:

1. Factors of positive influence on professional thinking as a higher cognitive process of searching, identifying, and creatively solving problems in the process of pedagogical activity. These are educational, subject, production, and personal factors.
2. Factors of negative impact on professional thinking as a higher cognitive process of finding, identifying, and creatively solving problems in the process of pedagogical activity. These are external, subject, production, natural, and household factors.

Literature:

1. Alexander K. L, Entwisle D. R, & Horsey C. S. (1997). From first grade forward: Early foundations of high school dropout. *Sociology of Education, 70*, 87-107.
2. Bakker, A. (2014). Daily Fluctuations in Work Engagement. *European Psychologist, 19*, 227-236.
3. Bakker, A. B., & Costa, P. L. (2014). Chronic job burnout and daily functioning: A theoretical analysis. *Burnout Research, 1*(3), 112–119.
4. Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD-R approach. *Annual Review of Organizational Psychology and Organizational Behavior, 1,* 389–411.
5. Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD-R approach. *Annual Review of Organizational Psychology and Organizational Behavior, 1*(1), 389-411.
6. Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress, 22*(3), 187-200.
7. Bakker, A.B., & van Woerkom, M. (2017). Flow at Work: a Self-Determination Perspective. *Occupational Health Science, 1,* 47-65.
8. Bask, M., & Salmela-Aro, K. (2013). Burned out to drop out: Exploring the relationship between school burnout and school dropout. *European Journal of Psychology of Education, 28*(2), 511–528.
9. Beltrán-Martín, I., Guinot-Reinders, J., & Rodríguez-Sánchez, A. (2022). Employee psychological conditions as mediators of the relationship between human resource management and employee work engagement. *The International Journal of Human Resource Management, 34*(11), 2331-2365.
10. Bianchi, R., Schonfeld, I. S., & Laurent, E. (2019). The trouble with burnout: An update on burnout-depression overlap. *The American Journal of Psychiatry, 176*(1), 79.
11. Buhs, E. S., & Ladd, G. W. (2001). Peer rejection as antecedent of young children's school adjustment: An examination of mediating processes. *Developmental Psychology, 37*(4), 550–560.
12. Connell, J. P., & Wellborn, J. G. (1991). Competence, autonomy, and relatedness: A motivational analysis of self-system processes. In M. R. Gunnar & L. A. Sroufe, eds. *Self processes and development* (pp. 43–77). Lawrence Erlbaum Associates, Inc.
13. Costa, P. T. Jr, & McCrae R. R. (1992). *NEO PI-R Professional Manual*. Odessa, FL: Psychological Assessment Resources, Inc.
14. Dimotakis, N., & Ilies, R. (2013). Experience-sampling and event-sampling research. In: A.B. Bakker, K. Daniels, eds. *A Day in the Life of a Happy Worker* (pp. 85-99). Hove, UK: Psychology Press.
15. Fredrickson, B. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*, 218-226.
16. Garrosa, E., Blanco-Donoso, L., Moreno-Jiménez, J. & et al. (2022). Energy Loss After Daily Role Stress and Work Incivility: Caring for Oneself with Emotional Wellness. *Journal of Happiness Studies, 23*, 3929-3959.
17. Hura, T. Ye. (2014). Psykholohiia rozvytku profesiinoho myslennia u maibutnikh psykholohiv u protsesi fakhovoi pidhotovky. [PhD dissertation brief]. Kyiv National University.
18. Lee, Y. T., Yang, H. G., & Wang, M. (2009). Daoist harmony as a Chinese philosophy and psychology. *Peace and Conflict Studies, 16*, 68-71.
19. Mäkikangas, A., Feldt, T., Kinnunen, U., Mauno, S. (2013). Does personality matter? Research on individual differences in occupational well-being. In: B. Bakker, ed. *Advances in Positive Organizational Psychology, Vol. 1* (pp. 107-143). Emerald.
20. Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology, 52*, 397-422.
21. Mier, T. I., Golodiuk, L. S., Palamar, S. P. & Bondarenko, G. L. Mastering your body and your health resources: from theoretical scientific developments to individual comprehension. Wiadomości Lekarskie. 2019. Vol. 72. Issue 11, cz 1.
22. Miller, R. B., Greene, B. A., Montalvo, G. P., Ravindran, B., Nichols, J. D. (1996). Engagement in academic work: The role of learning goals, future consequences, pleasing others, and perceived ability. *Contemporary Educational Psychology, 21*(4), 388-422.
23. Miyer, T. I., Holodiuk, L. S., & Savosh, V. O. (2021). Preventing the pre-sick conditions of those who practice lifelong learning *Wiadomości Lekarskie, LXXIV*(1), 107-111.
24. Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology, 82*(1), 33-40.
25. Rodríguez-Muñoz A, Sanz-Vergel A.I., Demerouti E., & Bakker A.B. (2014). Engaged at work and happy at home: A spillover-crossover model. *Journal of Happiness Studies, 15*, 271-283.
26. Salmela-Aro, K., & Read, S. (2017). Study engagement and burnout profiles among Finnish higher education students. *Burnout Research, 7*, 21-28.

27. Salmela-Aro, K., Tolvanen, A., & Nurmi, J.-E. (2009). Achievement strategies during university studies predict early career burnout and engagement. *Journal of Vocational Behavior, 75*(2), 162-172.

28. Schaufeli, W.B., & Van Rhenen, W. (2006). Over de rol van positieve en negatieve emoties bij het welbevinden van managers: een studie met de Job-related Affective Well-being Scale (JAWS). *Gedrag Organisatie, 19*(4), 323-344.

29. Schaufeli, W.B. & A.B. Bakker (2001). Work and well-being: Towards a positive approach in the behavior and organization of work and health psychology. *Gedrag & Organisatie, 14*(5), 229-253.

30. Sonnentag, S. (2011). Research on work engagement is well and alive. *European Journal of Work and Organization Psychology, 20*, 29-38.

31. Wells, S., Black, K., Bremmer, C., Melhorn, E., Zelin, A. (2021). College students' perceptions of anticipated career burnout. *Journal of American College Health, 71*(3), 921-929.

32. Wang, H., Ren, Y. & Liu, W. (2023). A Weekly Diary Study on Playful Study Design, Study Engagement, and Goal Attainment: The Role of Proactive Personality. *Journal of Happiness Studies, 24*, 159-184.

33. Wolters, C. A., Yu, S. L., & Pintrich, P. R. (1996). The relation between goal orientation and students' motivational beliefs and self-regulated learning. *Learning and Individual Differences, 8*(3), 211-238.

34. Xanthopoulou, D., Bakker, A.B., Demerouti, E., Schaufeli, W.B. (2007). The role of personal resources in the job demands-resources model. *International Journal of Stress Management, 14*, 121-141.

Primary Paper Section: A

Secondary Paper Section: AN