

***Oksana Liashch***

Vinnitsia Mykhailo Kotsiubynskyi State Pedagogical University,  
Doctor of Psychological Sciences, associate professor (Ukraine)

[oksanalyash7@gmail.com](mailto:oksanalyash7@gmail.com)

<https://orcid.org/0000-0002-1317-4398>

***Demian Sembrat***

Vinnitsia Mykhailo Kotsiubynskyi State Pedagogical University,  
Postgraduate student of the Department of psychology and social work

[sdsvin@gmail.com](mailto:sdsvin@gmail.com)

<https://orcid.org/0000-0002-1334-0894>

**GENDER AND AGE CHARACTERISTICS OF THE EMOTIONAL BURNOUT  
PHENOMENON AMONG IT EMPLOYEES**

Дослідження фокусується на гендерних та вікових аспектах емоційного вигорання серед фахівців у сфері інформаційних технологій (ІТ) та вивчає вплив різних факторів, таких як стать та вік, на виникнення та розвиток емоційного вигорання у працівників ІТ-сфери. У дослідженні аналізується взаємозв'язок між гендером та емоційним вигоранням, розкриваються можливі відмінності в сприйнятті робочого середовища, стресових ситуацій та здатності стратегій копінгу між чоловіками та жінками в ІТ-сфері. Також вивчається вплив вікових факторів на емоційне вигорання, зокрема, аналізується, як змінюються рівні стресу та вигорання протягом різних етапів кар'єрного зростання. Дослідження ставить за мету виявити особливості протистояння стресовим ситуаціям та ефективні методи запобігання емоційному вигоранню для різних груп працівників ІТ-сфери. Розглядаються різні аспекти емоційного вигорання, включаючи стрес на роботі, незадоволеність кар'єрним ростом, вікові та гендерні відмінності у сприйнятті робочого навантаження та емоційного благополуччя.

Дослідження спрямоване на розширення розуміння проблеми емоційного вигорання у контексті ІТ-індустрії та надає підстави для розробки персоналізованих стратегій підтримки та управління емоційними ризиками в цьому професійному середовищі. Крім того, пропонуються конкретні рекомендації щодо розробки гендерно-чутливих та віково-орієнтованих програм профілактики вигорання (індивідуальні стратегії підтримки, проведення тренінгів з управління стресом та створення робочих умов, сприятливих для збереження ментального здоров'я).

Також представлено напрямки подальших досліджень у цій області для поглибленого розуміння гендерних та вікових аспектів вигорання, вивчення взаємозв'язку між робочими умовами та емоційним вигоранням, розвиток та оцінка ефективності інтервенційних програм, а також врахування новітніх технологій та змін у робочому середовищі. Ці дослідження сприятимуть розширенню знань про емоційне вигорання та розробці більш ефективних стратегій його запобігання та подолання.

**Ключові слова:** емоційне вигорання; інформаційні технології; гендерні відмінності; вікові особливості; психологічна підтримка.

The research focuses on gender and age aspects of emotional burnout among information technology (IT) professionals and examines the influence of various factors, such as gender and age, on the occurrence and development of emotional burnout in IT workers. The research analyses the relationship between gender and emotional burnout, reveals possible differences in the perception of the working environment, stressful situations, and the ability of coping strategies between men and women in the IT field. The influence of age factors on emotional burnout is also studied, it is analyzed how the levels of stress and burnout change during different stages of career growth. The research aims to identify the specifics of coping with stressful situations and effective methods of preventing emotional burnout for different groups of IT workers. Various aspects of emotional burnout are considered, including stress at work, dissatisfaction with career growth, age, and gender differences in the perception of workload and emotional well-being.

The study aims to expand the understanding of the problem of emotional burnout in the context of the IT industry and provides grounds for the development of personalized strategies to support and manage emotional risks in this professional environment. In addition, specific recommendations are offered for the development of gender-sensitive and age-oriented burnout prevention programs (individual support strategies, stress management training and creation of working conditions conducive to maintaining mental health).

Also presented are directions for further research in this area for a deeper understanding of gender and age aspects of burnout, studying the relationship between working conditions and emotional burnout, developing, and evaluating the effectiveness of intervention programs, as well as considering the latest technologies and changes in the work environment. These studies will contribute to the expansion of knowledge about emotional burnout and the development of more effective strategies to prevent and overcome it.

**Keywords:** emotional burnout; Information Technology; gender differences; age characteristics; psychological support.

**Introduction.** In today's world, where information technology plays a key role in many areas of activity, work in the IT sector is becoming more and more demanding and stressful. Professional activity in this field is often accompanied by heavy workloads, constant stress, and increased responsibility, which leads to the problem of emotional burnout, which can negatively affect the physical and mental state, as well as work efficiency. Given the importance of this problem and its potential impact on the quality of life and professional activity of IT sector workers, there is a need for a deep understanding of the factors that cause emotional burnout, as well as for studying possible ways to overcome this problem.

The topic of emotional burnout among IT workers is relevant, as it directly affects work efficiency, health, and the general state of mental well-being of employees. Understanding the causes and consequences of this phenomenon is of great importance to employers and HR managers, as they will be able to develop strategies and programs to prevent emotional burnout and support the health of employees. This study may be of interest to specialists in psychology, management, and public organizations, as it opens opportunities for research and implementation of new methods of personnel management and psychological support at the workplace.

Depending on age characteristics, emotional burnout can manifest itself in different ways. For example, at a young age, when a person is just starting their career or education, the role of self-identification and setting personal goals may be particularly important, levels of emotional burnout may reflect insufficient support or lack of opportunities for development. In adulthood, especially for those with heavy workloads or responsibilities, emotional burnout can result from chronic stress and overwork.

Regarding gender differences, women may be more prone to emotional burnout, especially in professional fields where they face significant work-life balance demands. In men, emotional burnout may be less recognized or hidden because they may have stronger cultural and social norms of resilience and invulnerability.

However, it is important to consider that each person is unique, and the influence of age and gender factors on emotional burnout may manifest itself differently in each case. Therefore, to effectively manage emotional burnout, it is important to understand the individual characteristics of each person and provide individualized support and assistance.

**The purpose** of the article is to study the gender and age characteristics of emotional burnout among IT workers and its impact on the work environment. The tasks of the article include the study of the difference in the level of emotional burnout between men and women in the IT field, the study of the influence of gender stereotypes and expectations on the emotional state of employees, as well as a comparative analysis of the results of research on gender and age aspects of emotional burnout.

**Presentation of the main research material.** Emotional burnout is a complex and multifaceted psychological phenomenon that can affect the efficiency and well-being of employees in any industry. This is a state when a person feels exhausted not only physically, but also emotionally, because of prolonged stress, failure, or excessive workload. In the field of information technology, competition is particularly high, and the need for constant improvement and rapid changes often leads to exhaustion. Processes that can cause emotional burnout include the constant pressure of deadlines, information overload, and the feeling of losing control over the work process. Considering these factors, the study of emotional burnout among IT workers is of great importance for understanding and managing this phenomenon in the organizational environment.

Studies of emotional burnout in Ukraine are gaining more and more relevance because this phenomenon is becoming more and more common. In recent years, with the development of information technologies and the growth of the IT industry, there has been a significant increase in the number of workers in this sector in Ukraine. However, as the industry grows, so does the level of stress and strain on employees, which can lead to emotional burnout. The IT sphere in Ukraine is often characterized by high expectations for performance and constant pressure to achieve goals. This is especially true for young workers who are just starting their careers in this field. Regarding gender characteristics, it is worth noting that in Ukraine the field of IT is traditionally considered male. Women are increasingly starting careers in this field, but they may face specific challenges and stress related to professional stereotypes, inequality, and possible conflicts in the team.

However, there is currently no comprehensive study that would give a clear picture of the gender and age characteristics of burnout in the IT sphere of Ukraine. For example, in the article by Maksymchuk, K. and Podkorytova, L. an analysis of different views of researchers on the issue of emotional burnout in professions of the "non-social sphere" was carried out and the main differences between burnout in professions of the subject-subject type and professions of various types were highlighted. The researchers identified characteristic stressogenic factors of the professional activity of IT specialists, and based on this, made recommendations for improving the organizational policy in the middle of IT companies, which can reduce the risk of this condition occurring among their employees [1]. Shnaider O. V.'s research experimentally confirms that the ability to control one's behaviour through the management of emotions is closely related to emotional burnout, and the inability of a person to name the emotions experienced by him or by other people is more characteristic of younger workers [2]. In the paper of Vovk, O., a theoretical and experimental study of the problem of professional burnout among workers in the field of information technologies was carried out from a medical and psychological point of view, which confirms the presence of a formed syndrome of professional burnout, a high level of vulnerability, unstable self-esteem, as well as a great need for satisfaction and peace [3].

Despite the growing attention to the problem of emotional burnout in the IT sphere in Ukraine, research, and programs for psychological support of employees remain limited. For example, they are based on small samples or do not consider the specifics of the Ukrainian IT market. Most companies face the challenge of providing adequate support for their employees in a fast-paced and competitive market. Therefore, it is important to conduct further research and develop intervention programs aimed at reducing the risk of emotional burnout and maintaining mental health among IT sector workers in Ukraine. And to obtain a clearer picture of the gender and age characteristics of emotional burnout in the IT sphere of Ukraine, further research is needed that would consider the specifics of the Ukrainian context.

Danilo Monteiro Ribeiro's paper examines the relationship between burnout and instability in software engineering, finding a significant relationship between burnout perceptions and team, technology, and task instability among developers based on a cross-sectional survey of 411 respondents to identify and describe the relationships the connection between instability and burnout in the perception of specialists involved in the software development process [4]. A group of researchers (Emanuel Mellblom, Isar Arason, Lucas Gren, and Richard Torkar) investigated the relationship between five-factor personality traits and burnout in software developers and found a strong relationship between neuroticism and burnout in software developers, while others personality traits did not significantly contribute to burnout [5]. In the research "A Model for Understanding and Reducing Developer Burnout" the authors assessed the complex interplay between organizational culture, job satisfaction, and team climate and how they affect developer burnout through an empirical study in a large multinational company. Developer burnout is influenced by organizational culture, job satisfaction, and team climate [6].

In the context of the field of information technology, where men traditionally prevail, various gender dynamics are revealed, which have an impact on the emotional well-being of employees. Research (Relationship Between Burnout, Effort-reward Imbalance, and Insomnia Among Informational Technology Professionals) and (Workplace stress factors and 'burnout' among Information technology professionals: a Systematic Review) shows that women working in IT experience more difficulties in establishing themselves in a professional environment, which can lead to increased stress and emotional tension. They may face gender discrimination or stereotypes about their professional abilities, which often affects their level of emotional burnout. On the other hand, men may feel pressure to maintain their status and professional success in a field where they are outnumbered. This can cause insufficient attention to their emotional needs and the accumulation of emotional experiences, which can ultimately also lead to emotional burnout [7;8].

In the field of information technology, gender stereotypes and sociocultural expectations have a significant impact on the emotional state of employees. Women working in this field often face challenges related to rejection or underestimation of their professional abilities due to gender expectations. Instead, men may experience fear of not meeting expectations related to masculinity and professional success. This can lead to increased stress and emotional strain, as they may hold back their emotions and refuse to acknowledge their inner conflicts. Different risk factors affect emotional burnout in men and women. Research by H. Cameron, B., and Butcher-Powell, L. found that for men, the fear of being seen as weak or failing can be a particular problem, and for women, it is the pressure associated with stereotypes about their professional abilities and roles. Insufficient support from colleagues or management, as well as feelings of alienation in a male-dominated environment, can lead to feelings of insecurity and worthlessness, which are risk factors for emotional burnout [9; 10].

The development of effective strategies to prevent and overcome emotional burnout in the IT sphere requires considering gender differences in stress perception and problem-solving. For this, it is necessary to consider the individual needs and characteristics of each group of employees. One key strategy may be to create a supportive work environment that supports mental health. Such strategies may include conducting training on the development of stress management skills and creating opportunities for rest and recovery during the working day [11]. In addition, it is important to note the need for a gender-sensitive approach to the development of workplace healthcare programs that consider the specific needs and perspectives of men and women in the fight against stress and emotional burnout. For example, women may benefit from support programs for work-life balance and opportunities for open communication and emotional expression. For men, it is important to stimulate the expression of emotions and create a safe environment for expressing and discussing problems [12].

Understanding the impact of age factors on emotional burnout is also one of the key aspects of maintaining the mental health of IT workers. The ability to adapt to stressful situations and restore emotional balance depends on physiological and psychological changes that occur during a person's life. A group of researchers Packirisamy, P., Meenakshy, M., and Jagannathan, S. investigated that young workers may be more prone to emotional burnout due to high levels of ambition and desire for professional success, accompanied by insufficient ability to manage stress. Instead, older workers may face emotional burnout due to fatigue from long periods of work, low levels of stimulation, and prospects for career growth. Shih, S. P., Jiang, J. J., Klein, G., and Wang, E. identified that one of the specific risk factors for young workers may be overestimation of their own capabilities and workload overload, while for older workers, a sense of loss of professional relevance and uncertainty in the ability to adapt to new technologies [13; 14].

A comparative analysis of the gender characteristics of burnout among IT workers allows us to understand the influence of different aspects of identity on the risks and consequences of this condition. Gender and age characteristics of burnout can be manifested through different ways of perceiving stress, adaptation to workload, and ways of solving problems. For example, research by Marchand, A., Blanc, M., and Beauregard, N. suggests that men and women may respond differently to stressful situations. Men may be more inclined to hide their emotions and display aggressive manifestations, while women may show emotional burnout due to work overload and heavy responsibilities for household duties. Regarding age characteristics, in their work (Prevalence of burnout syndrome among Work-From-Home IT professionals), the researchers note that young workers may have a higher level of energy and ambition, but at the same time, less resistance to stress and overload. Older workers may show greater stress resistance, but at the same time, greater anxiety about their future career and a sense of loss of control over the situation [15; 16].

Gender and age differences are associated with different ways of detecting, the causes, and consequences of emotional burnout. Young men, for example, may have a greater stress resistance, which is related to their desire to succeed and willingness to accept challenges. However, it can also lead to an increased risk of emotional exhaustion due to work overload and insufficient stress management. Women, despite their ability to effectively manage stress, may be at higher risk of emotional exhaustion due to gender role challenges: pregnancy, childcare, and other aspects of personal life can increase levels of stress and emotional strain [17].

Older workers may be more resilient to stress due to experience and maturity, but also more vulnerable to emotional exhaustion due to fear of loss of work performance and perspective. Factors such as career changes, retirement age, and feelings of loss of control may increase the risk of emotional exhaustion in older workers [18].

Based on the analysis, gender-sensitive and age-oriented recommendations for burnout prevention programs were developed:

1. Prevention programs should consider gender and age differences in the response to stress and emotional exhaustion. Programs should be flexible and adapted to the needs of both men and women, as well as workers of different ages, as women and men may respond to stress differently. For example, women are more likely to show a tendency to burn out emotionally, while men may show more physical symptoms. It is also worth considering that the needs of employees may change with age, so programs must be flexible and adapt to these changes.

2. When developing prevention programs, it is necessary to involve specialists in gender and age issues, which will help consider the different needs and problems that men and women of different ages may face in the process of work. Involvement of experts on gender and age issues in the development of programs will ensure more effective consideration of the different needs and perspectives of different groups of employees.

3. The organization of trainings and seminars on stress management can help IT workers develop effective strategies for overcoming stress and preventing emotional exhaustion. Trainings and workshops can include practical exercises in meditation, relaxation, and stress management, as well as teaching positive thinking techniques and setting boundaries.

4. Employers must create working conditions conducive to maintaining the mental health of employees, which may include flexible work schedules, the possibility of remote work, as well as support for healthy lifestyle programs. Employers can also consider creating spaces for rest and relaxation in the office, as well as providing access to counselling with psychologists or stress counsellors.

5. Employees should have access to resources and programs that help them develop self-help skills and effective stress management (online courses, psychological support, and other resources). It is important to ensure that employees have access to information and resources that will help them maintain their mental health and effectively manage stress in their work and personal lives.

The overall goal of such programs is to create a favourable and healthy work environment for all IT workers, which will allow them to achieve high productivity and maintain mental health throughout their career path.

**Conclusions.** The results of the conducted research indicate a significant influence of gender and age characteristics on emotional burnout among IT workers. It was found that men and women can perceive and react to stressful situations differently, which affects the level of their emotional burnout. In addition, older workers may experience different stressors compared to their younger counterparts, which also affects their overall resilience to stress and emotional well-being. To successfully prevent and overcome emotional burnout among IT workers, it is necessary to develop programs that consider the various needs and characteristics of different groups of employees. Gender-sensitive and age-specific mental health prevention and support strategies can be effective tools for creating a supportive work environment that promotes high productivity and employee well-being.

**Prospects for further research.** Researching the phenomenon of emotional burnout among IT workers is only the beginning of the way to understanding this complex phenomenon. Further research should be aimed at understanding and considering more detailed aspects of the influence of gender and age on emotional burnout. Another important area of research is the study of which specific aspects of the work environment, such as the level of workload, the structure of the organization of working hours, and interactions with colleagues, affect the level of emotional burnout.

Given the rapid development of technology and changes in the organization of the work process, it is important to study how these factors affect the emotional burnout of IT workers and how to adapt support programs to new conditions.

### **List of References**

[1] Maksymchuk, K., Podkorytova, L. (2021). Osoblyvosti emotsiinoho vyhorannia pratsivnykiv IT-sfery yak predstavnykiv profesii subiekt-objektnoho typu. *Psychology Travelogs*, (2), 107-116. <https://pt.khmn.edu.ua/index.php/pt/article/download/28/29>

[2] Shnaider O. V. (2014). Psykholohichni osoblyvosti emotsiinoho vyhorannia pratsivnykiv sfery Informatsiinykh Tekhnolohii. *Naukovi zapysky Natsionalnogo universytetu "Ostrozka akademiia"*. Seriiia : Psykholohiia i pedahohika. – Vyp. 26. – S. 144-148. [http://nbuv.gov.ua/UJRN/Nznuoapp\\_2014\\_26\\_33](http://nbuv.gov.ua/UJRN/Nznuoapp_2014_26_33)

- [3] Vovk, O. (2021). Osoblyvosti syndromu profesiinoho vyhorannia v pratsivnykiv sfery Informatsiynikh Tekhnolohii. *Suchasna medytsyna, farmatsiia ta psykholohichne zdorovia*, (1(2)), 3-26. <https://journals.maup.com.ua/index.php/psych-health/article/view/32>
- [4] Relationship between burnout, effort-reward imbalance, and insomnia among Informational Technology professionals. (2022). Relationship between burnout, effort-reward imbalance, and insomnia among Informational Technology professionals. 11(1), 296. [https://doi.org/10.4103/jehp.jehp\\_1809\\_21](https://doi.org/10.4103/jehp.jehp_1809_21)
- [5] E. Mellblom, I. Arason, L. Gren and R. Torkar. The Connection Between Burnout and Personality Types in Software Developers. *IEEE Software*, vol. 36, no. 5, pp. 57-64, Sept.-Oct. 2019. <https://doi.org/10.1109/MS.2019.2924769>
- [6] B. Trinkenreich et al. A Model for Understanding and Reducing Developer Burnout," 2023 IEEE/ACM 45th International Conference on Software Engineering: Software Engineering in Practice (ICSE-SEIP), Melbourne, Australia, 2023, pp. 48-60. <https://doi.org/10.1109/ICSE-SEIP58684.2023.00010>
- [7] Raju, A., Nithiya, D., Tipandjan, A. (2022). Relationship between burnout, effort-reward imbalance, and insomnia among Informational Technology professionals. *Journal of Education and Health Promotion*, 11(1), 296. [https://doi.org/10.4103/jehp.jehp\\_1809\\_21](https://doi.org/10.4103/jehp.jehp_1809_21)
- [8] Maudgalya, T., Wallace, S., Daraiseh, N., Salem, S. (2006, May). Workplace stress factors and 'burnout' among information technology professionals: a systematic review. *Theoretical Issues in Ergonomics Science*, 7(3), 285–297. <https://doi.org/10.1080/14639220500090638>
- [9] H. Cameron, B., Butcher-Powell, L. (2006). Gender Differences among IT Professionals in Dealing with Change and Skill Set Maintenance. *Interdisciplinary Journal of Information, Knowledge, and Management*, 1, 151–157. <https://doi.org/10.28945/120>
- [10] AIS Electronic Library (AISeL) - AMCIS 2012 Proceedings: Theorizing the Dual Role of Information Technology in Technostress Research. (n.d.). <https://aisel.aisnet.org/amcis2012/proceedings/EndUserIS/12>
- [11] Beecham, S., Baddoo, N., Hall, T., Robinson, H., & Sharp, H. (2008, August). Motivation in Software Engineering: A systematic literature review. *Information and Software Technology*, 50(9–10), 860–878. <https://doi.org/10.1016/j.infsof.2007.09.004>
- [12] Managing workplace Stress and Burnouts in IT Industry in India: A Cross-Sectional Study. (2023, June 19). *Journalofcardiovasculardiseaseresearch*, 12(05). <https://doi.org/10.48047/jcdr.2021.12.05.314>
- [13] Packirisamy, P., Meenakshy, M., Jagannathan, S. (2017, February 13). Burnout during early career: lived experiences of the knowledge workers in India. *Journal of Enterprise Information Management*, 30(1), 96–121. <https://doi.org/10.1108/jeim-01-2016-0041>
- [14] Shih, S. P., Jiang, J. J., Klein, G., Wang, E. (2011, November). Learning demand and job autonomy of IT personnel: Impact on turnover intention. *Computers in Human Behavior*, 27(6), 2301–2307. <https://doi.org/10.1016/j.chb.2011.07.009>
- [15] Marchand, A., Blanc, M. E., Beaugard, N. (2018, June 15). Do age and gender contribute to workers' burnout symptoms? *Occupational Medicine*, 68(6), 405–411. <https://doi.org/10.1093/occmed/kqy088>
- [16] Kumaresan, A., Suganthirababu, P., Srinivasan, V., Vijay Chandhini, Y., Divyalaxmi, P., Alagesan, J., Vishnuram, S., Ramana, K., & Prathap, L. (2022, February 18). Prevalence of burnout syndrome among Work-From-Home IT professionals, 71(2), 379–384. <https://doi.org/10.3233/wor-211040>
- [17] Zaza, S., Riemenschneider, C., Armstrong, D. J. (2021, November 2). The drivers and effects of burnout within an information technology work context: a job demands-resources framework. *Information Technology & People*, 35(7), 2288–2313. <https://doi.org/10.1108/itp-01-2021-0093>
- [18] Tomar, A., Singh, A. P. (2023). Unraveling the Burnout-Work-Life Balance Nexus: A Secondary Data Analysis. <https://doi.org/10.25215/1201.136>

Review received 23.02.2024