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STUDY OF THE MENTAL HEALTH CHARACTERISTICS OF PERSONNEL WORKING IN MEDIUM-SECURITY CORRECTIONAL INSTITUTIONS OF THE STATE CRIMINAL-EXECUTIVE SERVICE OF UKRAINE ACCORDING TO THEIR DIAGNOSED LEVELS OF RESILIENCE

Abstract. This article presents an empirical study of the mental health characteristics of staff at medium-security prisons, with a particular focus on their organisational structure across different levels of resilience. The mental health of staff in prison institutions, in conditions of prolonged occupational stress, is shaped by the interplay between psychological vulnerability and resources associated with adaptive occupational functioning. The aim of the study was to empirically investigate the mental health characteristics of staff at medium-security prisons according to their diagnosed level of resilience and to identify patterns in the structural organisation of these psychological characteristics. A quantitative cross-sectional design was employed. The total sample comprised 8,443 staff members of the State Penitentiary Service of Ukraine; this study analysed a subsample of staff at medium-security correctional institutions ($N=4,171$). The psychodiagnostic battery comprised the Connor–Davidson Resilience Scale (CD-RISC-10), R. McLean’s Organisational Stress Scale, the Multidimensional Health Locus of Control Scale, the Mental Health Continuum – Short Form (MHC-SF) and the Positive Mental Health Scale. Statistical analysis was carried out using IBM SPSS Statistics, Version 24.0. Factor analysis was applied to identify the latent structure of psychological characteristics of mental health separately in groups with low, medium and high levels of resilience. The main results revealed systematic differences in the structural organisation of psychological characteristics of mental health depending on the level of resilience. In the group with low resilience, the factor structure was characterised by professional engagement combined with psychological defences, emotional tension, frustration, an external locus of control over health, and predominantly reactive coping strategies. At a moderate level of resilience, emotional lability and psychological defences remained significant, whilst the presence of adaptability, positive mental health, openness, self-reflection and autonomy increased. At a high level of resilience, internalisation in the sphere of achievement, genuine engagement in professional activities, an internal locus of control over health, social interaction and a breadth of interests took on greater structural significance, whilst components associated with psychological vulnerability were retained in the factor structure. The scientific novelty lies in the empirical identification of specific factor configurations of psychological characteristics of mental health associated with low, medium and high levels of resilience. It has been established that resilience is linked not only to differences in individual psychological characteristics, but also to systematic differences in their structural organisation and interrelationships. A higher level of resilience is associated with a more internally regulated and resource-diverse configuration of psychological characteristics, rather than with the absence of manifestations of psychological vulnerability. The practical significance of the findings lies in establishing an empirical basis for a differentiated psychological assessment and for identifying priority areas for psychological support in accordance with staff members’ levels of resilience. The findings can be utilised in the development of programmes to maintain mental health, foster resilience, and prevent occupational maladjustment and burnout amongst staff of the State Penitentiary Service of Ukraine. Resilience is linked not only to individual characteristics of mental health, but also to systematic differences in their structural organisation, reflecting various configurations of psychological resources and vulnerability components

that are significant for adaptation and professional functioning under conditions of prolonged occupational stress.

Key words: mental health, resilience, occupational stress, occupational burnout, correctional personnel, State Criminal-Executive Service of Ukraine, professional functioning.

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ДОСЛІДЖЕННЯ ХАРАКТЕРИСТИК ПСИХІЧНОГО ЗДОРОВ'Я ПЕРСОНАЛУ УСТАНОВ ВИКОНАННЯ ПОКАРАНЬ СЕРЕДНЬОГО РІВНЯ БЕЗПЕКИ ДЕРЖАВНОЇ КРИМІНАЛЬНО-ВИКОНАВЧОЇ СЛУЖБИ УКРАЇНИ ВІДПОВІДНО ДО ДІАГНОСТОВАНИХ РІВНІВ РЕЗИЛІЄНТНОСТІ

Анотація. У статті представлено емпіричне дослідження характеристик психічного здоров'я персоналу пенітенціарних інституцій середнього рівня безпеки з особливим акцентом на їхній організаційній структурі за різними рівнями резилієнтності. Психічне здоров'я персоналу пенітенціарних установ в умовах тривалого професійного стресу визначається взаємодією між психологічною вразливістю та ресурсами, пов'язаними з адаптивним професійним функціонуванням. Метою дослідження є емпіричне вивчення характеристик психічного здоров'я персоналу виправних закладів середнього рівня безпеки відповідно до діагностованого рівня їхньої резилієнтності та виявлення закономірностей у структурній організації цих психологічних характеристик. Було застосовано кількісний крос-секційний дизайн дослідження. Загальна вибірка складалася з 8 443 співробітників Державної кримінально-виконавчої служби України; у цьому дослідженні аналізувалася підвибірка співробітників виправних закладів середнього рівня безпеки ($N = 4\,171$). Психодіагностичний комплекс складався зі Шкали резилієнтності Коннора – Девідсона (CD-RISC-10), Шкали організаційного стресу Р. Макліна, Шкали багатовимірного локусу контролю здоров'я, Шкали психічного здоров'я скороченої форми (MHC-SF) та Шкали позитивного психічного здоров'я. Статистичний аналіз було проведено за допомогою програми IBM SPSS Statistics, версія 24.0. Для виявлення латентної структури психологічних характеристик психічного здоров'я співробітників окремо в групах із низьким, середнім та високим рівнями резилієнтності було застосовано факторний аналіз. Основні результати виявили систематичні відмінності у структурній організації психологічних характеристик психічного здоров'я залежно від рівня резилієнтності. У групі з низьким рівнем резилієнтності факторна структура характеризувалася професійною залученістю у поєднанні з психологічними захисними механізмами, емоційною напругою, фрустрацією, зовнішнім локусом контролю над здоров'ям та переважно реактивними стратегіями подолання труднощів. За середнього рівня резилієнтності емоційна лабільність та психологічні захисні механізми залишалися значущими, тоді як зростала присутність адаптивності, позитивного психічного здоров'я, відкритості, саморефлексії та автономії. За високого рівня резилієнтності більшого структурного значення набули інтерналізація у сфері досягнень, щира залученість до професійної діяльності, внутрішній локус контролю над здоров'ям, соціальна взаємодія та широта інтересів, тоді як компоненти, пов'язані з психологічною уразливістю, зберігалися у факторній структурі. Наукова новизна полягає в емпіричній ідентифікації специфічних конфігурацій факторів психологічних характеристик психічного здоров'я співробітників, пов'язаних із низьким, середнім та високим рівнями резилієнтності. Установлено, що резилієнтність пов'язана не лише з відмінностями в індивідуальних психологічних характеристиках, а й із систематичними відмінностями в їхній структурній організації та взаємозв'язках. Вищий рівень резилієнтності пов'язаний із більш внутрішньо регульованою та різноманітною за ресурсами конфігурацією психологічних характеристик, а не з відсутністю проявів психологічної вразливості. Практичне значення отриманих результатів полягає у створенні емпіричної основи для диференційованої психологічної оцінки та визначення пріоритетних напрямків психологічної підтримки відповідно до рівнів резилієнтності співробітників пенітенціарних інституцій. Отримані результати можуть бути використані під час розроблення програм із підтримки психічного здоров'я, розвитку резистентності та профілактики професійної дезадаптації й вигорання серед співробітників Державної кримінально-виконавчої служби України. Резилієнтність пов'язана не лише з індивідуальними характеристиками психічного здоров'я, а й із системними відмінностями в їхній структурній організації, що відображають різноманітні конфігурації психологічних ресурсів та компонентів вразливості, які мають велике значення для адаптації та професійного функціонування в умовах тривалого професійного стресу.

Ключові слова: психічне здоров'я, резилієнтність, професійний стрес, професійне вигорання, персонал пенітенціарних установ, Державна кримінально-виконавча служба України, професійна адаптація.

Problem. Mental health is one of the fundamental prerequisites for effective professional functioning, as it is directly associated with work capacity, productivity, decision-making quality, and an employee's ability to perform professional duties under conditions of increased workload [3]. According to the World Health Organization, mental health is defined as a state of well-being in which individuals realize their own potential, cope with the normal stresses of life, work productively and fruitfully, and contribute to their communities [1].

However, mental health alone does not fully determine an individual's capacity to function effectively under conditions of prolonged occupational stress. One of the key psychological resources that supports both mental health and professional effectiveness in adverse circumstances is resilience. In contemporary psychology, resilience is conceptualized as a dynamic process of positive adaptation to significant adversity that enables individuals to maintain or restore psychological well-being, professional effectiveness, and the capacity to perform occupational duties despite exposure to intense stressors. Thus, mental health and resilience represent related yet distinct constructs: mental health reflects an individual's overall state of psychological well-being and functioning, whereas resilience constitutes the adaptive psychological resource that enables the maintenance or restoration of this state under conditions of risk, uncertainty, and substantial occupational demands.

The role of resilience becomes particularly significant under wartime conditions, where prolonged exposure to security threats, uncertainty, increased professional responsibility, staff shortages, and the high intensity of occupational demands progressively deplete employees' adaptive resources and increase the risk of occupational burnout, psychological traumatization, occupational maladaptation, and deterioration of mental health. Under these circumstances, personnel resilience serves as a key psychological resource that supports mental health, professional effectiveness, and the capacity to perform occupational duties under prolonged occupational stress and extreme working conditions.

This issue is particularly relevant to the professional activities of the State Criminal-Executive Service of Ukraine, whose personnel operate under highly specific working conditions characterized by a high level of responsibility and continuous exposure to multiple occupational stressors. Importantly, correctional personnel perform their professional duties across institutions of different types and security levels, as well as in pre-trial detention centres and prisoner-of-war camps. Each type of institution is characterized

by distinct operational conditions, security regimes, inmate populations, security risks, and occupational demands placed upon personnel. These factors directly influence the intensity of psycho-emotional workload, the nature of occupational stress, and the opportunities for maintaining both mental health and resilience among correctional personnel.

According to the criminal-executive legislation of Ukraine, medium-security correctional institutions are designated for the detention of adult male offenders convicted of serious or particularly serious crimes, as well as specific categories of prisoners transferred from other correctional institutions based on assessments of their behaviour and level of risk. Compared with minimum-security correctional institutions, they are characterized by more restrictive detention regimes, enhanced levels of supervision and security, which substantially shape the specific nature of personnel's professional activities.

The socio-psychological environment of medium-security correctional institutions is determined by a high concentration of individuals with criminal backgrounds, the existence of informal inmate hierarchies, elevated levels of interpersonal conflict, the need for continuous enforcement of institutional regulations, and a high probability of critical incidents. Under such conditions, correctional personnel routinely operate in an environment of heightened psychological strain that requires constant readiness for rapid decision-making, conflict management, emotional self-regulation, and the maintenance of professional effectiveness under conditions of potential danger. At the same time, the performance of official duties requires personnel to ensure institutional security while simultaneously safeguarding human rights, a responsibility that is frequently accompanied by moral and psychological dilemmas and additional emotional demands.

Taken together, these characteristics of the occupational environment create conditions conducive to the development of chronic occupational stress, which constitutes an integral component of the everyday work of correctional personnel and may adversely affect both their physical and mental health [9]. Under these circumstances, resilience serves as one of the key psychological resources supporting professional functioning by facilitating adaptation to prolonged occupational stress, preserving mental health, and sustaining effective job performance. However, resilience varies considerably among personnel, resulting in differences in their capacity to adapt to occupational stressors, maintain psychological well-being, and sustain professional effectiveness. Consequently, the empirical assessment of resilience provides an opportunity for a more

comprehensive understanding of the characteristics of mental health in relation to the level of individuals' adaptive psychological resources. Such an approach makes it possible not only to evaluate the current state of personnel's mental health but also to identify psychological factors that may serve as a foundation for the development of targeted programmes of psychological support, occupational burnout prevention, and the promotion of psychological well-being among correctional personnel. Therefore, investigating the mental health characteristics of personnel employed in medium-security correctional institutions with regard to their diagnosed levels of resilience is of considerable theoretical and practical significance.

In contemporary psychology, the preservation of the mental health of professionals working under conditions of prolonged occupational stress is increasingly examined from the perspective of the resource-based approach to adaptation. Within this framework, particular attention is devoted to the study of the psychological and organizational resources that support mental health, professional functioning, and an individual's capacity to adapt to chronic occupational stressors.

Review of research and publications. One of the most influential theoretical frameworks in contemporary psychology is Hobfoll's Conservation of Resources (COR) theory [4]. Hobfoll argues that psychological stress arises when individuals experience a threat of resource loss, an actual loss of valued resources, or an insufficient return on resource investment following substantial resource expenditure. Within this framework, personal, social, and occupational resources are conceptualized as key determinants of an individual's capacity to withstand stressful experiences and maintain effective functioning under adverse conditions [4].

Within contemporary resilience research, the conceptualization of resilience has evolved from a stable personality trait to a dynamic process of adaptation. A. Masten emphasizes that resilience emerges through the functioning of fundamental adaptive systems and is not an exceptional characteristic possessed by only a few individuals. Rather, it represents the normative outcome of effective adaptation, provided that essential psychological resources are preserved [11]. A similar perspective is advanced by G. Bonanno, who conceptualizes resilience as the capacity to maintain relatively stable psychological functioning following exposure to potentially traumatic events without equating it with the absence of negative emotions or stress reactions [2].

Further support for this perspective is provided by the work of R. Kalisch and colleagues, who

proposed a contemporary multilevel framework of resilience. The authors emphasize the importance of investigating not abstract "resilient traits" but rather the processes of positive appraisal and adaptive mechanisms through which individuals maintain mental health when exposed to stressors [5].

Within the present study, resilience is conceptualized as a key psychological resource that enables positive adaptation to prolonged occupational stress while supporting mental health and professional functioning among correctional personnel. In this context, resilience is understood neither as the absence of stress reactions nor as a synonym for stress resistance. Instead, it is viewed as a dynamic capacity to maintain or restore adaptive functioning under conditions of substantial occupational demands.

Support for this conceptualization is also provided by empirical studies focusing on the occupational functioning of correctional personnel. In particular, G. Kinman, A. Clements, and J. Hart, drawing upon the Job Demands - Resources framework, demonstrated that the mental health of prison officers is strongly associated with excessive workload, challenging interpersonal relationships, role ambiguity, limited job control, and inadequate management of organizational change. The authors emphasize the necessity of implementing targeted organizational and psychological interventions aimed at improving staff well-being [6].

A complementary perspective is presented in the systematic review conducted by C. Finney, E. Stergiopoulos, J. Hensel, S. Bonato, and C. Dewa [12]. The authors demonstrated that occupational stress and burnout among correctional personnel are determined not only by direct interactions with incarcerated individuals but, to a considerable extent, by organizational stressors, including excessive workload, staff shortages, role conflict, insufficient managerial support, and limited opportunities to influence work processes. These findings provide compelling evidence that the mental health of correctional personnel should be understood as the outcome of interactions between individual psychological resources and characteristics of the organizational environment [12].

A complementary perspective is provided by V. Klinoff and colleagues, who shifted the focus directly to the psychological resources of correctional personnel.

Their findings revealed that hope, optimism, and social support were significantly associated with lower levels of occupational burnout, with resilience mediating this relationship. Specifically, personal strengths contributed to reducing burnout among correctional personnel through their positive

influence on resilience. Thus, rather than merely reporting a correlation between resilience and burnout, the authors identified resilience as a potential mediating mechanism through which personal and social resources are translated into more favourable occupational outcomes [8].

This line of research was further advanced by R. Schwartz and colleagues, who examined the impact of cumulative exposure to critical incidents on the mental health of correctional personnel. The authors emphasize that psychological outcomes are determined not only by the intensity of individual stressful events but also by their cumulative effect over time. Their findings further indicate that the availability of sufficient adaptive psychological resources facilitates more successful adaptation to chronic occupational stress and supports the maintenance of professional functioning among correctional personnel [13].

Taken together, contemporary international research demonstrates a gradual shift in scientific perspectives from viewing occupational stress primarily as a determinant of impaired mental health to recognizing the crucial role of individual psychological resources in sustaining professional functioning. Within the framework of the present study, resilience is conceptualized as one of the key psychological resources that facilitates positive adaptation to prolonged occupational stress, supports mental health, and enables effective professional functioning among correctional personnel.

However, despite the considerable expansion of international research in this field, the available literature indicates a lack of empirical studies examining the mental health characteristics of correctional personnel in relation to their diagnosed levels of resilience, particularly under the conditions of martial law in Ukraine. This gap in the scientific literature provided the rationale for conducting the present study.

The aim of the study was to empirically investigate the mental health characteristics of staff at medium-security prisons according to their diagnosed level of resilience and to identify patterns in the structural organisation of these psychological characteristics.

Main findings and discussion. The study employed a quantitative cross-sectional design and was conducted between January and March 2025 with the organizational support of the Department for the Execution of Criminal Sentences of the Ministry of Justice of Ukraine. The overall sample comprised 8,443 employees of the State Criminal-Executive Service of Ukraine, representing various categories of personnel employed in correctional institutions, pre-trial detention centres, and specialized facilities, including prisoner-of-war camps.

The study covered institutions administered by the North-Eastern, South-Eastern, Western, and Central-Western Interregional Directorates of the State Criminal-Executive Service of Ukraine. Empirical data were collected remotely through an online survey administered via Google Forms, the survey link being distributed among personnel of the participating institutions.

The present article reports the findings obtained from a subsample of 4,171 employees working in medium-security correctional institutions. The selection of this subsample was consistent with the aim of the study and made it possible to examine the mental health characteristics of correctional personnel according to their diagnosed levels of resilience under conditions of elevated occupational and psycho-emotional workload.

The socio-demographic and occupational characteristics of the study sample are presented in Table 1.

The study employed the methods of analysis, systematization, and synthesis of contemporary scientific literature addressing occupational stress, resilience, health locus of control, and the mental health of correctional personnel.

The empirical component of the study was conducted using the Connor – Davidson Resilience Scale (CD-RISC-10); McLean's Organizational Stress Scale; the Multidimensional Health Locus of Control Scale developed by K. A. Wallston, B. S. Wallston, and R. DeVellis, adapted by L. M. Karamushka, K. V. Tereshchenko, and O. V. Kredentser; the Mental Health Continuum – Short Form (MHC-SF) developed by C. Keyes, adapted by E. L. Nosenko and

Table 1

Demographic Characteristics of the Study Sample

Medium-security correctional institutions (n=4171)											
Length of service: up to 3 years			Length of service: 3–10 years			Length of service: 10–20 years			Length of service: over 20 years		
(n=286)			(n=865)			(n=1558)			(n=1462)		
Gender			Gender			Gender			Gender		
M	F	Not specified	M	F	Not specified	M	F	Not specified	M	F	Not specified
236	50	-	619	246	0	1112	446	-	1110	352	-

A. H. Chetveryk-Burchak; and the Positive Mental Health Scale developed by J. Lukat, J. Margraf, R. Lutz, W. M. van der Veld, and E. S. Becker, adapted by L. M. Karamushka, O. V. Kredentser, and K. V. Tereshchenko.

Statistical analyses were performed using IBM SPSS Statistics, Version 24.0. During the preliminary stage of data analysis, all variables were standardized using z-score transformation to enable comparisons across psychodiagnostic instruments employing different measurement scales.

The distribution of the empirical data was assessed using the Kolmogorov–Smirnov test for normality, the results of which served as the basis for selecting the appropriate parametric or non-parametric statistical procedures.

Factor analysis was conducted to identify the latent structure of the psychological characteristics of the mental health of personnel working in medium-security correctional institutions and to determine the underlying psychological factors within the subgroups characterized by low, medium, and high levels of resilience. The suitability of the data for factor analysis was assessed using the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity. The resulting factor structure was subsequently interpreted based on the analysis of factor loadings obtained following factor rotation.

The results of the factor analysis indicated that the structure of the psychological characteristics of the mental health of personnel working in medium-security correctional institutions differed substantially according to their diagnosed levels of resilience. These findings suggest that resilience is associated not only with individual psychological characteristics but also with systematic differences in the structural organisation and interrelationships of mental health components. A detailed description of the factor structure of the psychological characteristics of mental health identified in the *subsample of personnel with low levels of resilience, together with the interpretation and labeling of the extracted factors*, is presented below.

The first factor comprised the following variables: involvement (.757), evaluation of work outcomes (.756), life goals (.718), control (.683), professional aspirations (.651), perseverance (.633), activity and productivity (–.614), acceptance of others' values (–.601), internality in professional achievement (.595), professional interests and values (.590), breadth of interests (–.569), self-control (.549), and social desirability (–.501). The conceptual interpretation of these variables supported labeling this factor as Professional Involvement.

The second factor included the following psychological defense mechanisms: rationalization (.885), regression (.878), projection (.877), denial (.874), compensation (.849), and displacement (.846). As rationalization exhibited the highest factor loading, this factor was labeled Psychological Defense Through Rationalization.

The third factor consisted of risk acceptance (.872), anxiety (.791), aggressiveness (.771), rigidity (.697), emotional lability (.630), depressiveness (.598), shyness (.568), and neuroticism (.551). As risk acceptance exhibited the highest factor loading, this factor was labeled Risk Acceptance.

The fourth factor combined coping strategies, including indirect actions (.836), antisocial actions (.804), aggressive actions (.793), impulsive actions (.760), seeking social contact (.619), cautious actions (.607), and seeking social support (.556). Considering the conceptual content of these variables, this factor was labeled Manipulative Stress Coping.

The fifth factor comprised behavioural flexibility (.893), extraversion–introversion (.775), openness (.722), spontaneous aggressiveness (.697), emotional stability (.693), irritability (.645), and masculinity–femininity (.566). As behavioral flexibility exhibited the highest factor loading, this factor was labeled Behavioral Flexibility.

The sixth factor included the bipolar dimensions energy–fatigue (.834), elevated mood–depressed mood (.806), self-confidence–helplessness (.801), and calmness–anxiety (.764). The conceptual interpretation of these bipolar dimensions supported labeling this factor as Energy.

The seventh factor consisted of the following diagnostic indicators: Ce (actual control) (.764), Le (actual involvement) (.751), Aw (expected affect) (.714), Cw (expected control) (.713), Ae (actual affect) (.683), and Lw (expected involvement) (.667). The conceptual interpretation of these indicators supported labeling this factor as Readiness for Responsibility.

The eighth factor comprised internality in the domain of achievements (.744), internality in occupational relations (.637), internality in the domain of failures (.636), internality in family relationships (.599), and internality regarding health and illness (.584). As internality in the domain of achievements exhibited the highest factor loading, this factor was labeled Internality in the Domain of Achievements.

The ninth factor was represented by a single variable and was therefore labeled Frustration.

The tenth factor reflected respondents' health locus of control and included powerful others control (.701), internal health locus of control (–.630), and chance control (.606). Based on its

conceptual content, this factor was labeled External Health Locus of Control.

The generalized factor structure identified in this subsample is presented in Figure 1.

Thus, the factor structure of mental health among personnel with low levels of resilience is characterized by the predominance of psychological defense mechanisms, emotional tension, and behavioral responses to occupational stress. At the same time, professional involvement remains the principal integrative factor within this structure; however, its functioning is accompanied by a substantial contribution of defensive and compensatory psychological mechanisms, indicating limited adaptive resources among this group of correctional personnel.

The next stage of the analysis was aimed at specifying the factor structure of the mental health characteristics in the subsample of personnel working in medium-security correctional institutions with medium levels of resilience. The values of the Kaiser–Meyer–Olkin measure ($KMO = 0.925$) and Bartlett's

test of sphericity (approximate $\chi^2 = 63,384.441$; $df = 2346$; $p < .001$) confirmed the suitability of the data for factor analysis. Following factor rotation, a factor structure explaining nearly 55% of the total variance of the empirical dataset was obtained.

The extraction of the most significant factors was supported by high factor loading coefficients (Table 2).

In the present study, the first factor accounted for more than 9% of the total variance, the second for nearly 9%, the third for 5.6%, the fourth for 4.9%, the fifth for 4.6%, the sixth for 4.5%, the seventh for 4.1%, the eighth for 3.9%, the ninth for 3.6%, the tenth for 2.4%, and the eleventh for 2.2% of the total variance of the empirical dataset.

A detailed interpretation of each extracted factor is presented below.

The first factor comprised the following variables: perseverance (.786), professional aspirations (.685), evaluation of work outcomes (.650), life goals (.640), professional interests and values (.633), involvement (.627), control (.599), self-control (.591), internality

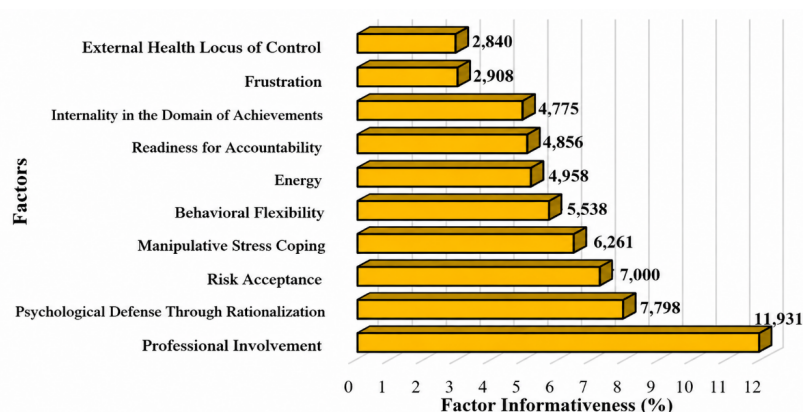


Fig. 1. Nominative–Informative Factor Structure of the Mental Health Characteristics of Personnel Working in Medium-Security Correctional Institutions with Diagnosed Low Levels of Resilience

Table 2

Eigenvalues of the Extracted Factors

Factors	Rotated Factor Matrix		
	Total (Eigenvalue)	Explained Variance (%)	Cumulative Variance (%)
1	6,459	9,361	9,361
2	6,182	8,960	18,321
3	3,932	5,699	24,021
4	3,417	4,952	28,973
5	3,227	4,676	33,649
6	3,154	4,570	38,219
7	2,832	4,105	42,324
8	2,736	3,965	46,290
9	2,486	3,602	49,892
10	1,692	2,453	52,345
11	1,521	2,204	54,548

in the domain of achievements (.590), and activity and productivity (-.573). The conceptual interpretation of these variables supported labeling this factor as Professional Perseverance.

The second factor included emotional lability (.763), aggressiveness (.739), anxiety (.729), depressiveness (.714), shyness (.685), neuroticism (.652), rigidity (.610), and irritability (.558). As emotional lability exhibited the highest factor loading, this factor was labeled Emotional Lability..

The third factor consisted of the basic psychological defense mechanisms: rationalization (.769), denial (.758), regression (.729), compensation (.696), projection (.691), and displacement (.685). Consistent with the previous subsample, this factor was labeled Psychological Defense Through Rationalization.

The fourth factor comprised internality in the domain of failures (.689), internality in the domain of achievements (.606), internality regarding health and illness (.603), internality in occupational relations (.579), and internality in family relationships (.531). According to the variable with the highest factor loading, this factor was labeled Internality in the Domain of Failures.

The fifth factor included the bipolar dimensions elevated mood–depressed mood (.791), energy–fatigue (.783), self-confidence–helplessness (.745), and calmness–anxiety (.693). The conceptual interpretation of these variables supported the label Adaptability.

The sixth factor comprised positive mental health (.833), antisocial actions (.796), indirect actions (-.752), aggressive actions (.678), and impulsive actions (-.508). This factor was labeled Positive Mental Health.

The seventh factor included expected control (Cw) (.757), expected involvement (Lw) (.695), actual control (Ce) (.652), actual involvement (Le) (.626), expected affect (Aw) (.601), and actual affect (Ae) (.580). As expected control exhibited the highest factor loading, this factor was labeled Expected Control.

The eighth factor consisted of openness (.855), extraversion–introversion (.774), masculinity–femininity (.604), spontaneous aggressiveness (.543), and emotional stability (.542). Based on the variable with the highest factor loading, this factor was labeled Openness.

The ninth factor included two variables: sociability (.667) and seeking social contact (.598). According to the variable with the highest factor loading, this factor was labeled Sociability.

The tenth factor comprised self-insight (.769), powerful others control (-.683), and internal health

locus of control (.673). The first variable determined the label Capacity for Self-Insight.

The eleventh factor included two variables: autonomy (.850) and positive relations with others (.848). According to the variable with the highest factor loading, this factor was labeled Autonomy.

The generalized nominative–informative factor structure identified in this subsample is presented in Figure 2.

The resulting factor structure indicates a gradual reorganization of psychological resources from predominantly defensive mechanisms toward more constructive adaptive characteristics. Alongside Professional Perseverance, Adaptability, Positive Mental Health, Openness, and Self-Insight emerged as major components of the factor structure, reflecting a more balanced organization of the psychological resources of personnel with medium levels of resilience.

The next stage of the analysis was aimed at specifying the factor structure of the mental health characteristics in the *subsample of personnel in medium-security correctional institutions with high levels of resilience*. The values of the Kaiser–Meyer–Olkin measure (KMO = 0.919) and Bartlett's test of sphericity (approximate $\chi^2 = 41,141.261$; $df = 2346$; $p < .001$) confirmed the suitability of the data for factor analysis. Following factor rotation, a factor structure explaining approximately 58% of the total variance of the empirical dataset was obtained.

The extraction of the most significant factors was supported by high factor loading coefficients (Table 3).

In the present study, the first factor accounted for more than 13% of the total variance, the second for 6.5%, the third for 6.1%, the fourth for 5.3%, the fifth for 4.7%, the sixth for 4.5%, the seventh for 4.4%, the eighth for 4.1%, the ninth for 3.8%, the tenth for 2.6%, and the eleventh for 2.2% of the total variance of the empirical dataset.

A detailed interpretation of the extracted factors and the rationale for their conceptual labels are presented below.

The first factor comprised the following variables: life goals (.752), involvement (.747), control (.709), evaluation of work outcomes (.698), perseverance (.678), internality in professional achievement (.658), activity and productivity (-.647), acceptance of others' values (-.604), self-control (.599), professional interests and values (.589), professional aspirations (.580), risk acceptance (.541), and self-insight (-.501). The conceptual interpretation of these variables supported labeling this factor Goal-Oriented Self-Reflection.

The second factor consisted of the following psychological defense mechanisms: denial (.823),

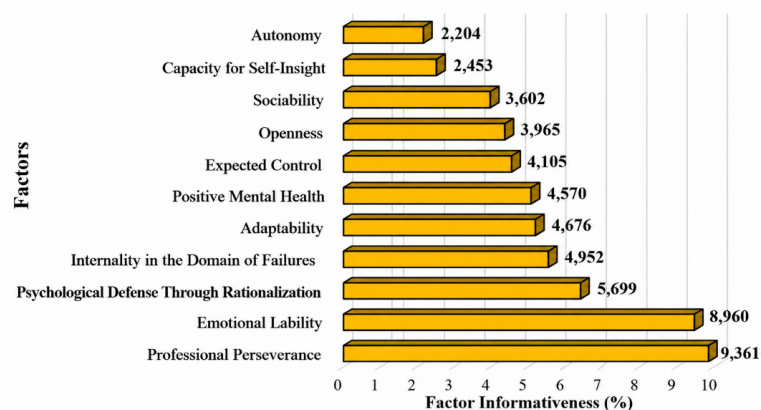


Fig. 2. Nominative–Informative Factor Structure of the Mental Health Characteristics of Personnel Working in Medium-Security Correctional Institutions with Diagnosed Medium Levels of Resilience

Table 3

Eigenvalues of the Extracted Factors

Factors	Rotated Factor Matrix		
	Total (Eigenvalue)	Explained Variance (%)	Cumulative Variance (%)
1	9,091	13,175	13,175
2	4,533	6,570	19,745
3	4,258	6,171	25,916
4	3,676	5,328	31,244
5	3,281	4,755	36,000
6	3,140	4,551	40,551
7	3,075	4,457	45,008
8	2,890	4,188	49,196
9	2,655	3,848	53,045
10	1,826	2,646	55,691
11	1,557	2,257	57,948

regression (.818), rationalization (.769), projection (.760), compensation (.758), and displacement (.734). According to the variable with the highest factor loading, this factor was labeled Psychological Defense Through Denial.

The third factor included aggressiveness (.768), anxiety (.731), rigidity (.633), depressiveness (.576), emotional lability (.574), neuroticism (.541), and shyness (.534). Based on the variable with the highest factor loading, this factor was labeled Aggressiveness.

The fourth factor comprised internality in the domain of achievements (.728), internality in interpersonal relationships (.654), internality in the domain of failures (.631), internality regarding health and illness (.624), internality in occupational relations (.623), and internality in family relationships (.619). According to the highest factor loading, this factor was labeled Internality in the Domain of Achievements.

The fifth factor consisted of the bipolar dimensions self-confidence–helplessness (.817), energy–fatigue (.800), elevated mood–depressed mood (.784), and calmness–anxiety (.739). The conceptual

interpretation of these variables led to the label Situational Helplessness.

The sixth factor comprised irritability (.864), extraversion–introversion (.737), masculinity–femininity (.658), emotional stability (–.653), openness (–.614), and spontaneous aggressiveness (.606). According to the dominant factor loading, this factor was labeled Irritability.

The seventh factor reflected the fundamental orientations of interpersonal relations and included actual involvement (Le) (.749), actual control (Ce) (.704), expected involvement (Lw) (.644), actual affect (Ae) (.641), expected control (Cw) (.633), and expected affect (Aw) (.591). The conceptual content of these variables supported the label Actual Involvement in Professional Activity.

The eighth factor included antisocial actions (.736), indirect actions (.699), and aggressive actions (.619). According to the variable with the highest factor loading, this factor was labeled Antisocial Actions.

The ninth factor consisted of seeking social support (.786), seeking social contact (.783), and cautious

actions (.731). Based on the conceptual interpretation of these variables, this factor was labeled Seeking Social Contacts.

The tenth factor comprised internal health locus of control (.873) and powerful others control (.716). According to the dominant component, this factor was labeled Internal Health Locus of Control.

The eleventh and final factor included breadth of interests (.868), autonomy (.752), and positive relations with others (.751). According to the variable with the highest factor loading, this factor was labeled Breadth of Interests.

The generalized nominative–informative factor structure identified in this subsample is presented in Figure 3.

Overall, the factor structure of personnel with high levels of resilience is characterized by the integration of professional, personal, and value-oriented components of mental health. The most prominent factors include Goal-Oriented Self-Reflection, Internality in the Domain of Achievements, Actual Involvement in Professional Activity, Internal Health Locus of Control, and Breadth of Interests, indicating a more internally regulated, integrated, and resource-diverse configuration of psychological characteristics among this category of correctional personnel.

Thus, the comparative analysis of the factor structures demonstrated that the level of resilience is associated not only with the degree of expression of individual psychological characteristics of mental health among personnel of the State Criminal-Executive Service of Ukraine, but also with the structural organization of these characteristics. Although all three models incorporated similar psychological components including professional

orientation, emotional characteristics, psychological defense mechanisms, stress-coping strategies, and health locus of control, their position within the factor structure, psychological meaning, and patterns of interrelationships differed substantially according to the level of resilience.

Among personnel with low levels of resilience, the factor structure was dominated by Professional Involvement, Psychological Defense Through Rationalization, emotional tension, Frustration, External Health Locus of Control, and predominantly reactive stress-coping strategies. In the group with medium levels of resilience, emotional lability and psychological defense mechanisms remained salient; however, they were complemented by Adaptability, Positive Mental Health, Openness, Self-Insight, and Autonomy. By contrast, personnel with high levels of resilience demonstrated a stronger emphasis on Internality in the Domain of Achievements, Actual Involvement in Professional Activity, Internal Health Locus of Control, social engagement, and Breadth of Interests.

Overall, higher levels of resilience were associated with a systematic pattern of structural differences, ranging from a predominantly defensive–compensatory organisation of mental health at low resilience to a more internally regulated, value-oriented, and socially engaged psychological structure at high resilience. At the same time, the persistence of certain manifestations of emotional tension and psychological defense mechanisms across all three models suggests that high resilience does not eliminate psychological vulnerability. Rather, it reflects the availability of a broader repertoire of psychological resources for its regulation.

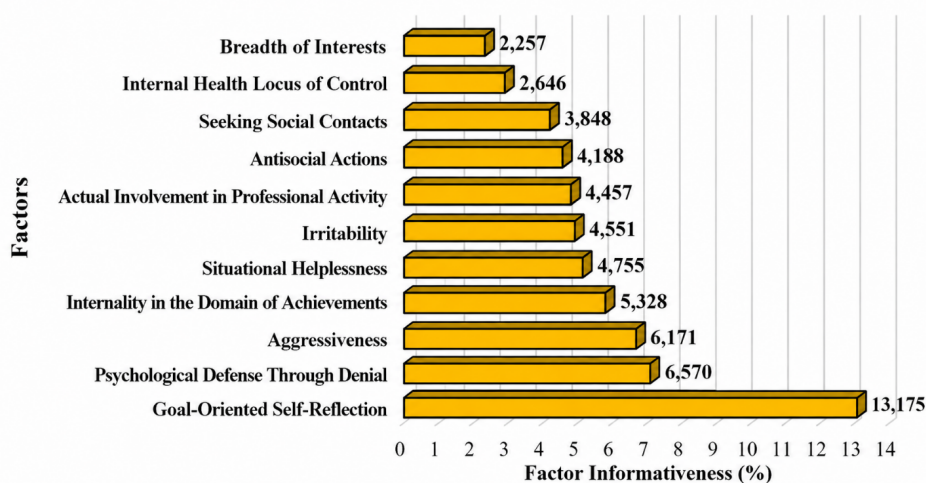


Fig. 3. Nominative–Informative Factor Structure of the Mental Health Characteristics of Personnel Working in Medium-Security Correctional Institutions with Diagnosed High Levels of Resilience

Conclusions. The study empirically established patterns in the structural organisation of the psychological characteristics of mental health among personnel working in medium-security correctional institutions according to their diagnosed levels of resilience. Comparison of the factor structures demonstrated that differences between the groups concern not only the degree of expression of individual psychological characteristics, but also their structural position, substantive meaning, and interrelationships within the overall organisation of mental health. Across all three groups, comparable substantive domains were identified, including professional orientation, emotional characteristics, psychological defence mechanisms, stress-coping strategies, and health locus of control; however, their structural organisation differed substantially according to resilience level.

Distinct factor configurations of mental health were identified for low, medium, and high levels of resilience. At low resilience, the structure was characterised predominantly by professional involvement in combination with psychological defence mechanisms, emotional tension, frustration, an external health locus of control, and predominantly reactive stress-coping strategies. At medium resilience, emotional lability and psychological defence mechanisms remained salient, while adaptability, positive mental health, openness, self-insight, and autonomy became more prominent. High resilience was characterised by a stronger structural role of internality in the domain of achievements, actual involvement in professional activity, internal health locus of control, social engagement, and breadth of interests.

A scientifically significant finding concerns the direction of the structural differences observed across resilience levels: from a predominantly defensive-compensatory and reactive organisation of psychological characteristics at low resilience to a more internally regulated and personally and socially resource-oriented organisation at high resilience. At the same time, high resilience was not accompanied by the complete absence of manifestations of psychological vulnerability: psychological defence mechanisms, negative emotional characteristics, and maladaptive behavioural components remained present within the corresponding factor structure. The findings therefore support an understanding of resilience not as the absence of negative psychological manifestations, but as the presence of a broader and structurally more diverse system of psychological resources that coexist with vulnerability factors and contribute to their regulation under conditions of prolonged occupational stress.

The scientific and methodological significance of the findings lies in the identification of factor configurations of the psychological characteristics of mental health

that are specific to different levels of resilience. This makes it possible to move beyond an undifferentiated assessment of correctional personnel's mental health towards the identification of structurally significant psychological resources and areas of vulnerability. Such an approach provides an empirical basis for developing a differentiated system of psychological assessment and support for personnel: at low resilience, with an emphasis on reducing defensive-reactive patterns of functioning, strengthening internal control, and developing constructive coping strategies; at medium resilience, on consolidating adaptive resources and self-regulation; and at high resilience, on maintaining and broadening the available resource repertoire while simultaneously addressing persistent manifestations of psychological vulnerability. The findings may be used in the development of programmes aimed at supporting mental health, enhancing resilience, and preventing occupational maladaptation among personnel of the State Criminal-Executive Service of Ukraine.

The Use of Artificial Intelligence. Generative artificial intelligence tools were not used.

Bibliography:

1. Кабінет Міністрів України. Концепція розвитку охорони психічного здоров'я в Україні на період до 2030 року : Розпорядження № 1018-р. 2017, 27 грудня. URL: <https://zakon.rada.gov.ua/laws/show/1018-2017-%D1%80> (дата звернення: 29.06.2026).
2. Bonanno G. A. Loss, Trauma, and Human Resilience: Have We Underestimated the Human Capacity to Thrive After Extremely Aversive Events? *American Psychologist*. 2004. Vol. 59, No. 1. P. 20–28. DOI: <https://doi.org/10.1037/0003-066X.59.1.20>
3. Blumberg I. Mental «health» and mental «illness». *Hosp. Commun. Psychiatry*. 1997. Vol. 13, No. 3. P. 229–239.
4. Hobfoll S. E. Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*. 1989. Vol. 44, No. 3. P. 513–524. DOI: <https://doi.org/10.1037/0003-066X.44.3.513>
5. Kalisch R., Baker D. G., Basten U. et al. The resilience framework as a strategy to combat stress-related disorders. *Nature Human Behaviour*. 2017. Vol. 1, No. 11. P. 784–790. DOI: <https://doi.org/10.1038/s41562-017-0200-8>
6. Kinman G., Clements A. J., Hart J. Job demands, resources and mental health in UK prison officers. *Occupational Medicine*. 2017. Vol. 67, No. 6. P. 456–460. DOI: <https://doi.org/10.1093/occmed/kqx091>
7. Kinman G., Clements A. J. Sickness presenteeism in prison officers: Risk factors and implications for wellbeing and productivity. *International Journal of Environmental Research and Public Health*. 2022. Vol. 19, No. 6. Art. 3389. DOI: <https://doi.org/10.3390/ijerph19063389>

8. Klinoff V. A., Van Hasselt V. B., Black R. A., Masias E. V., Couwels J. The assessment of resilience and burnout in correctional officers. *Criminal Justice and Behavior*. 2018. Vol. 45, No. 8. P. 1213–1233. DOI: <https://doi.org/10.1177/0093854818778719>
9. Lambert E. G., Keena L. D., Haynes S. H., May D., Leone M. C. Predictors of job stress among southern correctional staff. *Criminal Justice Policy Review*. 2020. Vol. 31, No. 2. P. 309–331. DOI: <https://doi.org/10.1177/0887403419829211>
10. Maslach C., Leiter M. P. Understanding the burnout experience: Recent research and its implications for psychiatry. *World Psychiatry*. 2022. Vol. 21, No. 2. P. 103–111.
11. Masten A. S. Ordinary magic: Resilience processes in development. *American Psychologist*. 2001. Vol. 56, No. 3. P. 227–238. DOI: <https://doi.org/10.1037/0003-066X.56.3.227>
12. Finney C., Stergiopoulos E., Hensel J., Bonato S., Dewa C. S. Organizational stressors associated with job stress and burnout in correctional officers: A systematic review. *BMC Public Health*. 2013. Vol. 13. Art. 82. DOI: <https://doi.org/10.1186/1471-2458-13-82>
13. Schwartz J., Valgardson B., Jodis C. A., Mears D., Steiner B. Examining the role of physiological and psychological responses to critical incidents in prisons in the development of mental health problems among correctional officers, Minnesota, 2018–2020. *Inter-university Consortium for Political and Social Research*. 2024. DOI: <https://doi.org/10.3886/ICPSR38803>
14. Smith H. P., Power J., Usher A. M., Sitren A. H., Slade K. Working with prisoners who self-harm: A qualitative study on stress, denial of weakness, and encouraging resilience in correctional staff. *Criminal Behaviour and Mental Health*. 2019. Vol. 29, No. 2. P. 92–105. DOI: <https://doi.org/10.1002/cbm.2103>
4. Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524. <https://doi.org/10.1037/0003-066X.44.3.513>
5. Kalisch, R., Baker, D. G., Basten, U., et al. (2017). The resilience framework as a strategy to combat stress-related disorders. *Nature Human Behaviour*, 1(11), 784–790. <https://doi.org/10.1038/s41562-017-0200-8>
6. Kinman, G., Clements, A. J., & Hart, J. (2017). Job demands, resources and mental health in UK prison officers. *Occupational Medicine*, 67(6), 456–460. <https://doi.org/10.1093/occmed/kqx091>
7. Kinman, G., & Clements, A. J. (2022). Sickness presenteeism in prison officers: Risk factors and implications for wellbeing and productivity. *International Journal of Environmental Research and Public Health*, 19(6), 3389. <https://doi.org/10.3390/ijerph19063389>
8. Klinoff, V. A., Van Hasselt, V. B., Black, R. A., Masias, E. V., & Couwels, J. (2018). The assessment of resilience and burnout in correctional officers. *Criminal Justice and Behavior*, 45(8), 1213–1233. <https://doi.org/10.1177/0093854818778719>
9. Lambert, E. G., Keena, L. D., Haynes, S. H., May, D., & Leone, M. C. (2020). Predictors of job stress among southern correctional staff. *Criminal Justice Policy Review*, 31(2), 309–331. <https://doi.org/10.1177/0887403419829211>
10. Maslach, C., & Leiter, M. P. (2022). Understanding the burnout experience: Recent research and its implications for psychiatry. *World Psychiatry*, 21(2), 103–111.
11. Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227–238. <https://doi.org/10.1037/0003-066X.56.3.227>
12. Finney, C., Stergiopoulos, E., Hensel, J., Bonato, S., & Dewa, C. S. (2013). Organizational stressors associated with job stress and burnout in correctional officers: A systematic review. *BMC Public Health*, 13, 82. <https://doi.org/10.1186/1471-2458-13-82>
13. Schwartz, J., Valgardson, B., Jodis, C. A., Mears, D., & Steiner, B. (2024). Examining the role of physiological and psychological responses to critical incidents in prisons in the development of mental health problems among correctional officers, Minnesota, 2018–2020. *Inter-university Consortium for Political and Social Research*. <https://doi.org/10.3886/ICPSR38803>
14. Smith, H. P., Power, J., Usher, A. M., Sitren, A. H., & Slade, K. (2019). Working with prisoners who self-harm: A qualitative study on stress, denial of weakness, and encouraging resilience in correctional staff. *Criminal Behaviour and Mental Health*, 29(2), 92–105. <https://doi.org/10.1002/cbm.2103>

References:

1. Cabinet of Ministers of Ukraine. (2017, December 27). Kontsepsiia rozvytku okhorony psykhychnoho zdorovia v Ukraini na period do 2030 roku [Concept for the Development of Mental Health Care in Ukraine until 2030] (Order No. 1018-r). Retrieved from: <https://zakon.rada.gov.ua/laws/show/1018-2017-%D1%80> [in Ukrainian].
2. Bonanno, G. A. (2004). Loss, Trauma, and Human Resilience: Have We Underestimated the Human Capacity to Thrive After Extremely Aversive Events? *American Psychologist*, 59(1), 20–28. <https://doi.org/10.1037/0003-066X.59.1.20>
3. Blumberg, I. (1997). Mental «health» and mental «illness». *Hosp. Commun. Psychiatry*, 13 (3), 229–239.

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