Differential Typology of Burnout in the Ukrainian Sample

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Abstract: Aim of study is a qualitative classification of manifestations of professional burnout based on quantitative indicators of exhaustion, cynicism and inefficiency. The paper substantiates the need to differentiate the symptoms of burnout from similar manifestations of professional maladjustment and personality disorders. The study involved 355 specialists of socionomic professions from different regions of Ukraine with work experience from 1 to 39 years (50.15% of men, 49.85% of women). Based on the cluster analysis of the three basic symptoms of burnout (exhaustion, cynicism, and depersonalisation), the groups of engaged and burned-out employees were identified, as well as qualitative and quantitative differences were showed. A comparative analysis of the groups was carried out for a number of additional diagnostic parameters: emotional attitude to work, the ratio of losses and gains of personal resources, the scale of psychological well-being, loyalty to the organisation. Typological profiles of 8 professional groups were created: effective employees ("engaged", "growing" and "taking" type), ineffective employees ("dependent" and "disengaged-relaxed" type), and three groups representing successive stages of burnout (accumulation of job stress, burnout itself and severe degree, accompanied by psychological distress in all spheres of life). The results allow us to conclude that particular symptoms of depersonalisation and reduction in personal achievements are not a sufficient basis for diagnosing burnout syndrome. The symptom of depersonalisation may be a manifestation of other professional deformations, not caused by burnout. Without combination with other parameters, the professional inefficiency is not a symptom of burnout; this is a common sign of insufficient development of competencies or an erroneous choice of the type of activity. Appropriate ways of organisational and psychological support are proposed.

Keywords: Exhaustion, depersonalisation, professional effectiveness, psychological well-being, organisational loyalty, work-related emotions, cluster analysis.

INTRODUCTION

The term "burnout", proposed in the mid-1970s to denote the specific stress of helping specialists, quickly gained popularity and embraced almost all current professions connected with communication and stressful situations. Thanks to the works of C. Maslach and her followers, this concept has received a clear conceptualisation and is considered as a three-dimensional syndrome. Burnout symptoms include: a) emotional and physical exhaustion, lack of energy; b) increased mental distance, negativism, cynical attitude from one's job and its beneficiaries; c) low level of personal achievements and progressive decline in professional efficiency [1,2]. Affordable and easy-to-use tools for measuring these symptoms have been proposed, leading to active research in various professions and countries; the accumulation of empirical data has made metanalysis possible [3-7]. Today, it is one of the most sought-after subjects of research in occupational health psychology and human resource management. A search in one ARA database alone yields almost 16,000 links to publications dealing with burnout issues.

Burnout explained many of the problems in the workplace: persistent employee fatigue, dissatisfaction, loss of enthusiasm, sense of pointless work, hostility towards customers and other employees, a general decline in work quality, more mistakes, etc. The

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psychological and physical risks of burnout have become known to a wide range of workers, most of whom say they feel these symptoms, but do not know what to do with them or how to get the help they need.

Over the past 50 years, research into the causes and consequences of burnout has largely changed organisations' policies towards workers. But, despite the attention of numerous scientific and social institutions, the interest of organisations in preserving the mental health of workers, the development of numerous resource-saving technologies, the problem is still far from being solved. Statistics show that the percentage of burned-out workers in various fields is growing steadily [8]; this problem no longer covers individual workers, but entire collectives and even branches. The reasons for this are the general growth of mental tension in society, a competitive economy, more and more complex professional tasks and challenges in the labour market. It is gradually becoming clear that burnout is easier to prevent than to deal with its negative manifestations and consequences. The positive approach suggested the opposite concept — work engagement — and proposed focusing on ways to achieve and maintain it [9].

At the same time, the critical analysis of this concept did not stop. Most of the questions in academic discussions are probably caused by the three-component structure of burnout, namely, the place and role of each symptom in the dynamics of the development of disorders. In the original concept of K. Maslach, these signs are successive stages in the development of burnout symptoms. But conflicting data were obtained in subsequent studies; two aspects of burnout — exhaustion and depersonalisation — are recognised as the main ones, but the mechanism of the gradual formation remains insufficiently understood [10]. In more recent studies, the authors pointed to the existence of latent burnout forms that correlate with organisational factors [11]. In addition, experts often point to a nosological ambiguity of symptoms, their similarity with the manifestations of depressive and anxiety disorders [6, 12, 13].

All this necessitates efforts aimed at a clear and understandable differentiation of the symptoms of emotional burnout from similar manifestations of professional maladjustment and personality disorders. A study by French psychologists [14] found that the use of thresholds to assess burnout can be misleading; an alternative is to classify workers by risk groups. In recent years, a number of empirical studies have been conducted demonstrating the diversity of *burnout profiles* in selected professional groups [13, 15, 16]. We consider this a promising and practically useful area of work, which will significantly improve preventive measures and the quality of support.

The research objective is a qualitative classification of manifestations of professional burnout based on quantitative indicators of exhaustion, cynicism and inefficiency. This will help to clarify the diagnostic significance of individual symptoms and their combinations to determine the priority areas of intervention. We assumed that within the general symptomatology of burnout there are qualitatively different subtypes that have different psychological characteristics and differ in the degree of work engagement.

METHODS

Respondent

The sample consisted of 355 people — representatives of socionomic professions from Kyiv and Kyiv region, Cherkasy, Chernivtsi and Ternopil with work experience from 1 to 39 years. The age of the subjects ranged from 19 to 60 (the average is 37.57±9.48), all had a secondary specialised or higher education. The majority (61.06%) were employees of non-governmental organisations and private entrepreneurs. In general, the sample is balanced in terms of gender composition (50.15% of men, 49.85% of women), although there was a gender predominance in some professional groups (Table **1**).

Measurements

Professional Burnout Questionnaire. A Russian-language version of Maslach Burnout Inventory adapted and standardised by [10], is a leading tool for diagnosing burnout symptoms in various professional groups. It consists of 22 items with a 7-point rating scale from 0 "never" to 6 "every day". The resulting assessments are divided into three components: emotional exhaustion, depersonalisation and reduction of personal achievements. When interpreting the data, it should be remembered that the reduction rate is inverted and, in fact, shows a self-assessment of professional success.

Differential Emotions Scales allowed clarifying the state of health of the respondents and finding out the dominant type of attitude to work. The research tool

Table 1: The Professional and Demographic Composition of the Sample

	N	Gender composition, %		Age	Work experience at the last job
		women	men		
Sales consultants	41	51.22	48.78	24-56	2-15
Bank employees	49	42.86	57.14	23-42	2-11
Insurance agents	25	60	40	30-43	5-16
City school teachers	48	66.67	33.33	25-60	3-39
University lecturers	43	55.81	44.19	23-54	2-32
Emergency medical personnel (trainees of refresher courses)	34	55.88	44.12	24-51	4-30
Call centre staff	45	44.44	55.56	19-36	1-11
Heads of IT departments and projects	36	22.22	77.78	28-45	2-18
Private entrepreneurs	34	50	50	30-52	4-19

contains 30 points aimed at assessing what emotions employees most often experience in the course of their professional activities. A 5-point rating scale is used, ranging from "not applicable at all" to "quite right". Three points correspond to each of ten basic emotions – scales of the method: interest, joy, surprise, sadness, anger, disgust, contempt, fear, shame, guilt [17].

The scales of psychological well-being allow us to diagnose eight components of positive personality functioning based on the C. Ryff's synthetic concept: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life and self-acceptance. We used the Russian-language cultural-specific version of 46 questions, developed by [18]. The general indicator of psychological well-being reflects the degree of subjective satisfaction with oneself and life in general.

The Losses and Acquisition of Resources Questionnaire [19] were developed on the basis of the S. Hobfoll's concept of resource conservation and is designed to diagnose resource provision for psychological well-being and predict the risk of burnout. Resources are everything that is valuable and significant for a person, that he needs to feel satisfied with life and helps him adapt to stress: physical health, material items and income, working and living conditions, professional skills and individual characteristics, ideas and beliefs, social and moral support, etc. The questionnaire includes two identical 30-item lists of resources, which the subject evaluates on a 5-point Likert scale according to his experiences over the past year. The scores obtained are summed up in the scales "Acquisitions" and "Losses"; *the resource index* (quotient from the division of these two indicators) indicates the balance of lost and compensated resources. Psychological stress and burnout occur when the balance is disturbed, i.e. when the consumption of personal resources is greater than the degree of their replenishment.

Organisational Commitment Scale is developed by J.P. Meyer and N.J. Allen, in 1993, based on the authors' three-component model explaining the nature of the relationship between the employee and the organisation. Affective commitment determines the degree of employee engagement and emotional attachment to the organisation, identification with it; continuous commitment — awareness of the costs that leaving the organisation may entail; normative commitment – the employee's sense of commitment and moral duty to the organisation. The methodology consists of 18 questions with a 7-point rating scale, and the result represents an organisational loyalty profile. The experience of using OCS in Russian-speaking samples showed the peculiarities of the respondents' perception of questions. This is why the three-factor structure of loyalty is not confirmed, and it is adequate to evaluate it as a single construct [20]. The questionnaire is recommended for use in groups of personnel with a sufficiently high educational and social status [21].

All methods have an authoritative theoretical foundation, proven validity and reliability, and are standardised on representative samples. Their additional advantage is the cost-effectiveness of the survey and data processing procedure. Extensive experience of use in practical work and scientific

research has made it possible to accumulate a lot of data from various social and professional groups.

Procedure

The invitation to take part in a survey was made public in professional communities. Participation in the survey was voluntary, which implied motivation for self-knowledge and personal interest in the stated topic. The employees of the enterprises were aware of the objectives of the study and the tools used, and the confidentiality of the results was guaranteed. With informed consent, the respondents received preliminary instructions from the experimenter and a link to Google forms and completed the questionnaires on their own. There were 22 primary protocols rejected due to incomplete or invalid data.

The study was conducted in accordance with the ethical principles and the Code of Conduct of the ARA psychologists and the Declaration of Helsinki. The study program and protocol were approved by the Ethics Committees of the: Psychology Research Department of the Kyiv Scientific Research Institute of Forensic Expertise of the Ministry of Justice of Ukraine; Psychology Department of the the Bohdan Khmelnytsky National University of Cherkasy; Department of Pedagogy and Methods of Primary Education, Faculty of Pedagogy, Psychology and Social Work of the Yuriy Fedkovych Chernivtsi National University; Department of Psychology, Socio-Historical Faculty of the Hryhorii Skovoroda University in Pereiaslav; Department of Psychology, Faculty of Pedagogy and Psychology of the Ternopil Volodymyr Hnatiuk National Pedagogical University.

Data Processing

The data obtained were preliminary checked for normal distribution using the Kolmogorov-Smirnov test. The absence of significant deviations allowed using parametric methods of analysis. Since there were no significant gender differences in the estimates, the entire set was analysed as one sample.

Cluster analysis was performed to differentiate burnout profiles. This is a heuristic method that helps to organise data sets and classify cases into groups suitable for further interpretation. The grouping of observations was carried out on the basis of a combination of three quantitative estimates: exhaustion, depersonalisation and reduction of achievements. We analysed two solutions obtained in different ways. Tree-like hierarchical clustering allowed obtaining a visual possibly significant solution (Average Linkage Between Groups using Squared Euclidean distance, the data is pre-standardised). At this stage, two taxonomic branches were identified in the sample — engaged and burned-out respondents — consisting of 6 and 4 groups, respectively. The k-means method helped to maximise differences between clusters and test their statistical significance.

To confirm the results, and additional comparative analysis of the selected groups was carried out. The mean scores of burnout symptoms in clusters were compared with the results of the general sample; Student's t-test was applied for groups with different variances. Group differences in additional diagnostic parameters (emotional attitude to work, components of psychological well-being, the ratio of losses and acquisitions of resources, loyalty to the organisation) were tested using one-way ANOVA. Thus, the psychological interpretation of the clusters was clarified — 8 professional groups were identified, including three types of work engagement, two types of non-engagement/inefficiency, and three stages of burnout; their distinctive characteristics are indicated.

Calculations were made in Excel (2007) and SPSS Statistics (version 20).

RESULTS

The combination of three levels of severity (high, medium and low) of three indicators of burnout (exhaustion, depersonalisation and reduction of personal achievements) gives 3^3, that is, 27 possible combinations of attributes. But in reality, not all of them are found, since certain symptoms develop in combination. Dendrogram of clustering showed 18 basic groups of 1 to 42 observations combined into larger branches. Clarification of intergroup differences led to the formation of ten rather isolated groups of workers (burnout and work engagement profiles) — see Table **2**.

The interpretation of the first cluster branch is fairly unambiguous. It brought together people who are least prone to burnout: engaged, motivated, friendly and attentive to their surroundings, professionally successful. They can be divided into three subcategories:

- Cluster 1a represents a small number of employees with the highest sense of personal

Table 2: Final Cluster Centers in Relation to Sample Burnout Means

Cluster branches		N	Emotional. exhaustion	Depersonalization	Reduction of achievements
Entire sample			19.35	9.77	34.34
1	1a "professional stars"	15	6.74***	1.60***	42.22***
	1b"engaged employees"	62	12.86***	4.19***	37.43*
	1c"going towards the goal"	38	18.47	4.04***	40.30***
2	2a"taking employees"	31	10.4***	11.6*	43.13***
	2b"cynical users"	29	14.25**	16.75***	42.50***
3	"ineffective engaged"	14	22.56*	1.88***	29.76**
4	4a"first stage of burnout"	65	22.14*	10.02	31.14
	4b"second stage of burnout"	39	28.49***	13.60**	29.84**
	4c"third stage of burnout"	28	30.63***	17.34***	27.70***
5	"ineffective disengaged"	27	16.27*	7.59*	28.31**
various atypical cases of burnout		9	29.38	13.51	18.22

Note: according to the calculations of the Student's t-test, * marks indicators that significantly differ from the average values of the general sample (p≤0.05), ** — significant differences at p≤0.01, *** — significant differences at p≤0.001.

success. The minimal symptoms of burnout allow characterising them as professional stars — *"those on the wave of success"*.

- Cluster 1c has similar characteristics, but they are somewhat less emotionally resourceful and engaged in work, and the success rate is closer to the average for the sample. Let us call them *"successful employees"* and note that this is one of the most numerous groups in the sample.

In Cluster 1c, we see super-high estimates of professional success again, but they are accompanied by pronounced emotional stress (at the level of the sample mean) in this group. We assume that this group brought together specialists who persistently strive for career achievements, but achieve them through great efforts, overcoming difficulties on their way — "going towards the goal". Further analysis of diagnostic and demographic data is required to determine whether this cluster is at risk of burnout.

The next cluster branch unites employees with severe symptoms of depersonalisation with relatively favourable (significantly below average) indicators of exhaustion. It also has extremely high success scores — even higher than in Cluster 1. We assumed that this category represents "taking employees," cynically using others and organisational resources to achieve their goals. Within it, two subgroups can be distinguished with different ratios of the "exhaustion" and "depersonalisation" scales.

The combination of a high indicator of depersonalisation with business activity and confidence in their professional competence does not allow us to attribute these respondents to a high risk of burnout in its classical sense. In this case, high depersonalisation scores do not indicate low work engagement, loss of enthusiasm and a sense of goal (rather the opposite). They can reflect the formalisation of interpersonal relationships and cynicism in relation to other subjects of professional activity: clients, patients, students, as well as colleagues. This is probably a professional deformation that requires additional study.

Cluster 3 is the opposite of the previous cluster. This is a small group of employees with minimal depersonalisation scores with increased emotional exhaustion and a reduced sense of professional success and competence. This allows us to characterise the cluster as *"giving employees"*, and attribute them to the burnout risk group. It is required to study the protective mechanisms operating in this group in more detail.

In the hierarchical clustering tree, groups 1-3 merge into a single branch, which makes it possible to designate all these cases as employees *without burnout.* This category includes 189 respondents, that is, 53.2% of the surveyed.

About half of the cases represent various manifestations of professional maladjustment. They are combined into four homogeneous groups, and there is

also a small number of various atypical manifestations (7 people who do not fit into the classification, including cases of extremely severe burnout symptoms associated with extreme distress and possibly clinical disorders).

Cluster 4 (a, b, and c) presents a classic three-stage picture of the development of *burnout symptoms* described in the literature — severe exhaustion, which grows and turns into depersonalisation, then reduces professional competence. Different combinations of severe burnout symptoms require a more detailed explanation. Their meaning will be clarified in the results of additional diagnostics.

Against this background, a rather large group stands out, which we singled out in Cluster 5, which is characterised by low indicators of achievement in the absence of other symptoms of burnout. As will be shown below, these are simply people who are unsuccessful in their profession and do not make efforts for professional and personal growth.

Comparison of indicators of resource capacity, psychological well-being and attitude to work allowed identifying important characteristics of clusters, combine similar groups and designate their differentiating features, as well as determine possible ways of organisational and psychological intervention —Table **3**.

Table 3: Psychological Characteristics of Clusters

Diagnostic parameters:	Average score in the cluster								Mean in the sample	F
	1a+c	1c	2a+b	3	4a	4в	4 c	5		
	N=77	*N=38*	*N=60*	*N=14*	*N=65*	*N=39*	*N=28*	*N=27*		
Psychological well-being	203.2	206.8	212.1	160.4	187.4	164.5	159.9	175.4	189.87	20.41***
Positive relations	33.14	34.39	36.01	25.67	29.14	29.20	28.50	29.68	31.58	11.98***
Autonomy	32.57	33.96	36.72	26.20	30.75	27.17	26.47	29.41	31.40	11.94***
Environment management	33.67	35.51	34.94	31.55	31.19	26.74	25.99	31.02	31.82	11.65***
Personal growth	35.24	33.96	37.07	25.13	33.05	28.45	26.84	25.94	32.33	12.37***
Life goals	35.13	36.10	35.65	28.61	32.26	27.81	27.54	28.61	32.49	9.45***
Self-acceptance	33.42	32.89	31.73	23.26	31.02	25.13	24.56	30.75	30.16	10.78***
Resource index	1.22	1.22	1.31	0.96	1.01	0.95	0.86	1.08	1.11	17.27***
Loss of resources	63.35	70.03	60.61	73.22	96.40	105.6	107.7	83.79	80.41	15.56***
Acquisition of resources	77.28	85.17	79.45	70.39	97.75	100.2	93.16	90.57	87.04	20.74***
Loyalty to the organization	4.58	5.00	4.88	4.26	4.15	3.92	3.26	4.15	4.35	2.59*
Emotions in relation to work:										
interest*	12.48	13.44	10.71	7.15	8.06	7.06	5.04	6.17	9.46	10.56***
joy	10.43	10.73	9.80	7.24	7.25	6.41	4.03	6.29	8.26	7.21***
surprise	7.65	9.88	6.54	3.42	6.64	4.15	3.75	5.38	6.41	7.35***
sadness	1.56	2.02	2.86	3.15	4.15	4.45	4.86	1.85	3.03	3.03**
anger	0.89	1.07	4.89	0.76	1.12	1.85	2.17	0.36	1.81	1.41
disgust	0.56	0.87	1.12	0.81	1.27	2.03	2.27	0.54	1.16	2.15*
contempt	0.67	0.55	3.16	0.81	0.83	1.24	2.86	0.55	1.38	2.72**
fear	0.47	1.17	0.36	3.45	1.78	2.05	3.13	1.60	1.41	3.69***
shame	0.33	0.41	0.78	1.12	0.80	1.42	1.48	0.43	0.77	1.82
guilt	0.59	0.97	1.07	0.58	1.21	1.39	1.37	0.47	0.98	1.68

Note: * marked indicators Oneway ANOVA for which significant intergroup differences were found ($p \leq 0.05$), ** — significant differences at $p \leq 0.01$, *** — significant differences at $p \leq 0.001$.

DISCUSSION

Based on the entire set of data obtained, we can distinguish eight groups of employees, depending on the qualitative characteristics of burnout/work engagement.

1. *Successfully engaged employees (Cluster 1*) make up 32.4% of the sample. They are active, cheerful, emotionally stable, have an adequate reserve of energy and personal resources; attentive, sympathetic to the subjects of their professional activities; motivated, have goals (including professional ones) that give a sense of meaning and fulfilment to their life, and most importantly, they successfully achieve them. They feel positive emotions in relation to the performed activity and are quite loyal to their organisation.

We can call this cluster "*burning employees*" if we consider engagement as the opposite of burnout [9].

Among this type, the 1c group should be specially noted, which distinguishes by higher emotional stress. We have previously characterised them as "going towards the goal". Most of the group consisted of students of advanced training courses. Additional diagnostics showed that they are more worried about the consumption of resources, but also have a strong sense of "acquisition." These are employees in the stage of active professional growth, which naturally requires energy inputs, but is also accompanied by a significant increase in the sense of competence and success, which maintains balance and serves as protection against burnout. Although this is the least stable system of all categories of successful employees, this instability is due to growth and development — self-realisation. They are satisfied with themselves and their lives. The leading components of psychological well-being are skill in managing the environment, and a sense of direction, beliefs that give the meaning of life. It is noteworthy that this group has the highest loyalty to the organisation, as well as the highest indicator of interest in work.

These fascinating observations are important for the personnel policy of organisations in relation to talented and gifted employees.

2. *A qualitatively different type of active and highly productive employees (Cluster 2).* It accounts for 16.9% of the sample, and includes employees with high rates of depersonalisation. Earlier, we assumed that this is a sign of a possible professional deformation, reflecting a "taking" position towards other subjects of activity while maintaining overall work engagement. Additional diagnostic data confirmed this assumption. Representatives of this cluster have the highest indicator of psychological well-being (especially the components "Positive relations", "Autonomy" and "Personal growth"), as well as the highest resource index among other groups. Deep motivation to achieve, preserve, protect and accumulate their values (personal resources) is the regulator of their activity. In this group, we also see a slight increase in the severity of negative emotions directed at others, such as anger and contempt.

This is sufficient justification to consider high scores for "Depersonalization" scale outside the context of burnout, as a kind of emotional and professional buffer. This cluster includes almost all managers of different levels, both with great experience and those who have recently taken up their job. This explains the nature of the phenomenon identified — such specialists objectify people, considering them as a resource for achieving their professional goals.

A similar phenomenon was described in the studies of [22]: leaders in the field of education have an increased level of depersonalisation in comparison with subordinate teachers; in all cases, depersonalisation was combined with emotional work engagement and high self-efficacy. The researcher concluded that "depersonalisation of managers is not a symptom or consequence of burnout at work — it is a component of other personality disorders and professional destructions characteristic of managers". The data obtained confirm and supplement these conclusions.

Thus, the interpretation of the severity of the depersonalisation symptom must necessarily take into account the concomitant level of emotional exhaustion and professional success, as well as the specifics of work tasks (managers and other categories of specialists, such as doctors, sports coaches, teachers, etc.).

3. *«Giving Away» (Cluster 3*) is an interesting category of workers that have not been previously described in professional psychology. It included 3.9% of the sample, mostly women. It combines high engagement and motivation with high emotional tension and a low sense of

professional success. The diagnostic data supported the assumption on the "giving more than receiving in return" trend. This causes a general decrease in the level of psychological well-being: they are dissatisfied with life, their past, relationships with others, and, first of all, with themselves. The level of positive emotions in relation to work is significantly reduced; there is a feeling of fear. The feeling of boredom and disinterest are caused by a lack of meaningful goals and inspiring life beliefs. Most likely, loyalty to the organisation is due to the fear of losing a job and the corresponding social support. They are insecure and dependent on the environment, feel incapable of acquiring new competencies. This category of employees needs regular psychological and organisational support.

A rather large cluster 5 (7.6% of the sample, mainly men and an employee over 50) has similar characteristics, where there are also signs of a reduction in achievements, but depersonalisation and emotional exhaustion are absent. The indicators of personal growth and life goals are reduced here, as well as in the previous group. The fundamental difference of this cluster is the ratio of input and consumption of resources. The lack of significant useful results of activity is caused by saving their own efforts; age-related changes associated with the loss of a goal are possible. They are simply *unsuccessful employees*. However, they are quite complacent and satisfied with themselves. There is no need for measures to reduce burnout; most likely, a change in functions or an adequate increase in the competence will help.

4. *Burnout Workers*. The most interesting is Cluster 4 (37.2% of the sample), which united three groups with different symptoms of burnout — Figure **1**.

Groups 4a, 4b, and 4c represent the classic three-stage picture of the development of burnout symptoms described in the literature [1, 10, 23].

Stage 1 (Cluster 4a) — a high level of professional stress is observed in almost a fifth of the respondents. They are quite psychologically healthy, happy with their lives and work, and loyal to the organisation. The increase in burnout is evidenced by the resource index below the average, that is, the non-compensating use of energy and physical resources. Stress is directly reflected in the entire spectrum of emotional reactions. The first signals of burnout are a decreased manifestation of positive emotions (interest and joy), and a significant increase in the reactions of the depressive-negative spectrum: fear, guilt, shame, as well as aggressiveness, which is aggravated in the following stages.

Cluster 4b reflects the development of symptoms — a qualitative transition of stress into *burnout itself*. Figure **2** shows a sharp leap in the exhaustion rate, signs of depersonalisation and a reduction in personal achievements appear. This is accompanied by an imbalance in the consumption and acquisition of resources, which further exacerbates the stress.

Cluster 4c represents the next, *deeper level of burnout development* — the gap between the indicators of exhaustion, depersonalisation and reduction of success from the sample mean values is much more

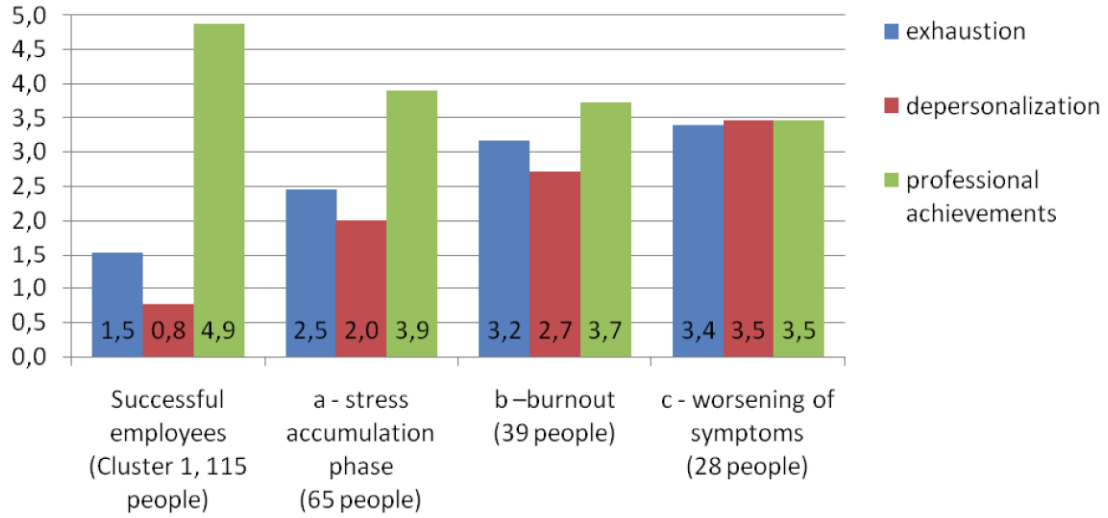

Figure 1: Development of burnout symptoms in Clusters 4a, 4b, 4c (mean scores for the scales).

pronounced here. Burnout symptoms persist and cause disruption in other areas of life besides work. This group has the lowest indicator of psychological well-being, which affects all components of a person's functioning. The imbalance of resources becomes critical, and consumption significantly exceeds the acquisition. Emotions of the negative spectrum predominate in the emotional sphere — a low mood becomes a familiar background.

It is noteworthy that with the onset and development of burnout, the quantitative assessment of resource losses and acquisitions increases significantly (while the balance can be maintained or violated). This may indicate the instability of the conditions of professional activity in relation to the costs and recovery of resources, as well as an increase in their subjective value, due to the frustration of leading needs. Already at the initial stage of burnout, employees become more sensitive to losses and acquisitions of resources, which is reflected in the average scores in Table **3**. Further, with the development and aggravation of symptoms, the resource balance is disturbed, and the feeling of losses — physical, energetic, existential, material and others — begin to dominate in a person.

The described profiles of different types of "burned-out" and "burning" employees provide valuable information for diagnosing manifestations of professional maladjustment in organisations and providing the necessary assistance.

Previous studies have already developed burnout profiles by cluster analysis in different professional groups.

In their study, healthcare workers [16], based on Maslach's methodology, professional and demographic characteristics, identified 8 clusters, three of which are successful, and five groups with a high degree of fatigue require close supervision of the management. In addition to the data of Maslach's methodology, the authors operate with demographic characteristics and organisational stress factors; our research shows the justification of this approach.

French psychologists identified four different profiles: no risk of burnout, high risk of burnout, risk of burnout through high emotional exhaustion or through low personal accomplishment [14]. Our classification gives a more detailed picture of symptoms, clarifies the emotional background, the balance of resources, the degree of influence on satisfaction with life and work.

The development of [11] has the greatest authority, which explains the varied manifestations of burnout using five latent burnout profiles. In addition to the opposite poles *burnout — engagement* (when the indicators of three symptoms are unambiguously high or low), profiles with high ratings of only one scale were found in the data of large samples: *overextended* with a high indicator of emotional exhaustion; *disengaged*, which is characterised by high cynicism, destruction of professional identity, and *ineffective*. The data of the Ukrainian sample fit into this classification but give the last two profiles a different explanation, which takes them out of the problematic field of burnout.

Thus, our proposed classification is the most detailed and allows us to distinguish three profiles of burnout, as well as types of professional maladjustment that have diagnostic signs of burnout, but are not such in essence.

A study of secondary school teachers [13] identified three burnout profiles: (a) with a predominance of low levels of emotional exhaustion and high levels of depersonalisation (that is, "taking employees"), (b) with high levels of emotional exhaustion and depersonalisation (that is, "burned out"), (c) a low level of depersonalisation and personal accomplishment (the symptoms of the third cluster correspond to the group of "unsuccessful" workers identified in our study). Group (a) is characterised by relatively high self-esteem and self-confidence, for the group (b) — negative emotional expression (expression of anger, rage and hostility), depressive symptoms, disappointment, deterioration in the quality of interpersonal relationships, inability to solve their problems; the groups also significantly differed in coping strategies. Modern Ukrainian researchers noted the important role of emotions, including aggressiveness, in the regulation of stress at work [24-26]. Thus, the clusters that we identified are present in different cultural and professional groups and have similar psychological characteristics.

CONCLUSIONS

Cluster analysis allowed separating the classical picture of burnout from similar mental phenomena of a different nature. With this approach, obvious symptoms were found in 37% of the surveyed employees, while three profiles of burnout with varying degrees of severity were revealed: accumulation of work stress, burnout itself, and a severe degree accompanied by

psychological distress in all spheres of life. In addition, other types of employee maladjustment are shown.

The results are convincing that some symptoms of depersonalisation (cynicism) and reduction in personal achievements are not a sufficient basis for diagnosing burnout. Emotional exhaustion is the very first and obligatory sign of the accumulation of stress at work. Depersonalisation is a symptom manifests itself at the second stage (with a pronounced imbalance of personal resources for overcoming stress) and indicates the transition of burnout to deeper processes of personal functioning. The symptom of depersonalisation itself may be a manifestation of other professional deformations (positions), not caused by burnout. The achievement reduction indicator is significant in combination with the first two parameters. Without them, this is a sign of lack of ability to work and inefficiency, due to insufficient development of competencies or an erroneous choice of the type of activity. Professional inefficiency is expectedly accompanied by stress, but this is not a symptom of burnout.

The results obtained allow us to outline guidelines for the differential diagnosis of professional burnout syndrome, as well as ways of providing organisational and psychological support.

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