

Development and validation of a new diagnostic tool for identifying burnout syndrome

Oleg S. Chaban, Olena O. Khaustova, Vitaliy Yu. Omelyanovich

BOGOMOLETS NATIONAL MEDICAL UNIVERSITY, KYIV, UKRAINE

ABSTRACT

Aim: To creation the first Ukrainian burnout syndrome diagnostic scale and confirm the quality of its psychometric characteristics.

Materials and Methods: The study was conducted using a newly developed questionnaire administered to 1,405 academic staff members of higher educational institutions in Ukraine. Test validation was carried out using exploratory factor analysis, Spearman's rank correlation coefficient, Ferguson's δ coefficient, Cronbach's α coefficient, Guttman's split-half coefficient, and the Spearman-Brown equivalent forms coefficient.

Results: The criterion validity was assessed through factor analysis, yielding 10 factors. Consequently, the initial version of the questionnaire was reduced by 10 items with the lowest factor loadings. The final version consists of 50 items with a dichotomous response scale. The discriminatory power of the questionnaire, evaluated using Ferguson's δ coefficient, was found to be extremely high (δ -Ferguson = 0.988). Consistency indices also demonstrated high reliability: α -Cronbach = 0.877; Guttman split-half = 0.848; Equal-length Spearman-Brown = 0.857. The concurrent reliability of the questionnaire was assessed using Spearman's correlation analysis, showing statistically significant positive correlations of most questionnaire items with the overall test score (≥ 0.419 ; $p \leq 3.29E-15$).

Conclusions: The obtained results confirm the feasibility of using the first Ukrainian "Questionnaire for Identifying Burnout Syndrome" (© Chaban O.S., 2025) in practical psychology, medicine, and burnout research.

KEY WORDS: burnout syndrome, questionnaire, diagnostic scale, test, psychometric properties, validation, medical psychology

Wiad Lek. 2025;78(5):1037-1044. doi: 10.36740/WLek/205365 DOI

INTRODUCTION

Burnout has been included in the 11th Revision of the International Classification of Diseases (ICD-11) by the World Health Organization (WHO) [1], but not as a disease or medical condition; rather, it is classified as an occupational phenomenon under the section "Factors influencing health status or contact with health services." The ICD-11 provides the following definition: "Burnout is a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed. It is characterized by three dimensions: feelings of energy depletion or exhaustion; increased mental distance from one's job, or feelings of negativism or cynicism related to one's job; and reduced professional efficacy."

Diagnostic criteria for burnout were first structured and described in 1974 by Herbert J. Freudenberger [2], who introduced the term into psychological discourse. However, the term "burnout" was first used five years earlier in a publication on penitentiary psychology by Harold B. Bradley, who applied it to describe the condition of juvenile detention facility guards [3]. Since

then, many standardized diagnostic scales have been developed to identify and measure burnout severity.

The first widely used burnout questionnaire was the "Maslach Burnout Inventory" (MBI) [4], developed in 1981 by Maslach C. & Jackson S.E. According to Maslach's concept, burnout comprises three components: emotional exhaustion, depersonalization, and reduced personal accomplishment. The Utrecht Work Engagement Scale (UWES), developed in 1999 by Schaufeli W. & Bakker A. [5], followed a similar three-component model but measured slightly different aspects: vigor, dedication, and absorption. Another notable scale is the Swedish Shirom-Melamed Burnout Measure (SMBM) by Shirom A. & Melamed S. (2006) [6], which prioritizes emotional exhaustion among its three subscales: physical fatigue, cognitive weariness, and emotional exhaustion. In 2021, Parker G. & Tavella G. introduced the "Sydney Burnout Measure (SBM)" [7], which encompasses exhaustion, cognitive impairment, loss of empathy, social withdrawal, and decreased productivity, alongside symptoms of anxiety, depression, and irritability.

Table 1. Distribution of the study group by gender and years of professional experience

Gender	Men	Women
Mode Age	47	44
Mode Years of Experience	15	20
Minimum Age	18	18
Maximum Age	85	80
Total Participants	352	1053

Additionally, alternative conceptual models of burnout have been proposed. For instance, in 1999, Demerouti E. & Bakker A.B. introduced the “Oldenburg Burnout Inventory” (OLBI) [8], based on a two-component job demands-resources model. The Copenhagen Burnout Inventory (CBI), developed in 2005 by Kristensen T.S., Borritz M., Villadsen E., & Christensen K.B. [9], was also built on a two-component framework, focusing on fatigue and exhaustion.

Currently, three major burnout diagnostic scales are used in Ukrainian-language publications: MBI (adapted by Vodopyanova N.E. & Starchenkova E.S.), Boyko V.V.’s test, and Ilyin Ye.P.’s questionnaire. However, a bibliographic search for validated Ukrainian burnout questionnaires found none, indicating that all tests used in Ukrainian medical and psychological practice, as well as in research, are either direct translations of Russian tests or Russian adaptations of English-language scales, with no independent validation on a Ukrainian sample.

This concerning fact underscores the need for the development of the first domestically designed burnout questionnaire, validated for use in the general Ukrainian population, with psychometric properties confirmed through rigorous statistical analysis.

AIM

The aim of this study was to creation of a new burnout syndrome diagnostic scale and confirmation of the acceptability of its psychometric characteristics.

MATERIALS AND METHODS

The study included 1,405 academic staff members from higher educational institutions in Ukraine, as educators are considered a high-risk group for burnout due to the nature of their profession [10]. The sample comprised 352 men (25.1%) and 1,053 women (74.9%) (Table 1).

A more detailed breakdown of the sample in terms of age, work experience, professional role, and marital status revealed no statistically significant differences between male and female respondents (Table 2). Fisher’s φ^* transformation calculations confirmed the homogeneity of the research group ($\varphi^* \leq 1.314343$; $p > 0.095$).

Test validation was carried out using exploratory factor analysis, Spearman’s rank correlation coefficient, Ferguson’s δ coefficient, Cronbach’s α coefficient, Guttman’s split-half coefficient, and the Spearman-Brown equivalent forms coefficient.

RESULTS

The initial version of questionnaire for identifying burnout syndrome (QIBS) consisted of 60 items with a dichotomous response scale (“yes”/“no”). The items were selected using a dimensional approach by compiling a pool of significant questions based on

Table 2. Descriptive statistics and Fisher’s φ transformation coefficient calculation for age, marital status, years of experience, and managerial positions in the study group

Characteristic	Men (n=352)	Women (n=1053)	φ
Age <30	31 (8.8%)	83 (10.0%)	0.194
Age 30-40	79 (22.4%)	240 (22.8%)	0.450
Age 40-50	105 (29.8%)	428 (36.6%)	1.314
Age 50-60	73 (20.7%)	201 (20.0%)	0.372
Age >60	64 (18.2%)	101 (10.9%)	1.298
Experience <10 years	70 (19.9%)	181 (17.2%)	0.493
Experience 10-20 years	104 (29.5%)	259 (24.6%)	0.960
Experience 20-30 years	77 (21.9%)	383 (36.4%)	2.573
Experience >30 years	101 (28.7%)	230 (21.8%)	1.323
Managerial position	91 (25.9%)	205 (19.5%)	1.213
Faculty position	261 (74.1%)	848 (80.5%)	1.159
Married	238 (67.6%)	689 (65.4%)	0.614
Single	95 (27.0%)	222 (21.1%)	1.129
Divorced	17 (4.8%)	104 (9.9%)	0.750
Widowed	2 (0.6%)	38 (3.6%)	0.319

Table 3. Results of Exploratory Factor Analysis (Rotated Component Matrix after Varimax Rotation with Kaiser Normalization)

Item	Component												
	1	2	3	4	5	6	7	8	9	10	11	12	13
1	-0,59	-0,25	-0,14	-0,14	-0,1	0,057	0,095	-0,03	-0,2	0,002	-0,15	0,22	0,089
2	0,465	0,303	0,325	0,113	0,251	0,016	-0,07	0,077	0,007	0,046	0,224	0,039	-0,11
3	0,162	0,155	0,445	0,171	0,432	0,036	-0,08	0,007	0,071	0,214	-0,02	-0,1	0,087
4	0,095	0,079	0,372	-0,03	0,048	0,082	0,187	0,174	-0,06	0,379	0,277	0,008	-0,13
5	-0,29	-0,64	-0,08	-0,05	-0,07	-0,01	0,078	-0,05	-0,04	-0,09	-0,19	0,137	0,135
6	0,231	0,372	0,222	0,252	0,189	-0,01	0,213	0,094	-0,18	-0,04	0,091	0,14	-0,2
7	0,679	0,207	0,146	0,133	0,154	0,003	0,01	0,043	0,039	0,012	-0,01	0,077	-0,01
8	0,08	0,122	0,064	0,082	0,107	0,168	0,172	0,008	0,037	0,624	0,095	0,081	0,049
9	0,108	0,415	0,32	-0,02	0,093	0,066	0,019	0,226	0,192	0,099	0,159	0,044	-0,24
10	-0,14	-0,04	-0,03	-0,13	-0,06	0,018	-0,01	0,116	-0,7	-0,01	-0,01	-0,01	0,086
11	0,21	0,247	0,24	0,043	0,113	0,031	0,073	0,098	0,609	0,036	0,053	0,071	-0,03
12	0,41	0,152	0,123	0,181	0,57	0,031	0,136	0,087	0,003	0,111	-0,01	-0,03	-0,1
13	0,057	0,045	0,583	0,076	0,281	0,11	0,028	0,069	0,017	0,072	0,026	-0,08	0,091
14	0,107	0,095	3E-04	0,093	0,693	0,041	0,179	0,095	0,046	0,022	-0,05	-0,03	-0,07
15	0,196	0,08	0,264	0,226	0,329	0,028	0,339	-0,07	0,01	0,309	-0,05	-0,13	-0,06
16	0,626	0,259	0,184	0,239	0,265	-0,01	0,027	0,041	0,027	0,06	-0,04	-0,02	-0,02
17	0,294	0,117	0,501	0,232	0,286	0,09	0,014	-0,04	0,015	0,233	0,049	-0,08	-0,01
18	0,008	0,149	0,225	0,134	0,538	0,144	-0,03	0,087	0,045	0,148	0,191	-0,01	5E-04
19	0,069	0,731	0,067	0,042	0,132	0,034	0,119	0,002	0,078	0,001	-0,09	0,013	0,073
20	0,072	0,141	0,799	-0,01	0,008	0,007	0,085	0,037	0,04	0,002	0,035	0,068	-0,02
21	0,037	0,048	0,751	0,096	-0,05	0,081	0,035	-0,02	0,065	-0,09	0,046	0,073	-0,07
22	0,307	0,149	0,172	0,242	0,212	-0,02	0,411	0,072	-0,12	0,149	0,148	0,049	-0,2
23	-0,04	-0,03	-0,02	-0,17	-0,07	0,031	0,09	-0,13	0,047	0,131	-0,11	0,692	0,015
24	0,021	0,059	0,133	0,205	0,101	0,62	0,023	-0,11	0,029	0,069	-0,11	0,126	0,125
25	-0,09	0,098	0,204	0,361	0,139	0,294	0,103	0,037	0,133	-0,09	0,366	0,058	0,102
26	0,023	-0,04	0,015	-0,03	-0,03	0,028	0,002	0,032	-0,1	0,037	0,098	0,027	0,762
27	0,104	0,015	0,145	0,562	0,199	0,021	0,241	0,127	0,075	0,041	0,097	-0,03	-0,02
28	0,051	0,245	0,254	0,424	0,122	0,26	0,035	0,069	0,047	-0,11	0,199	0,065	0,123
29	0,185	0,137	0,128	0,135	0,639	0,071	0,261	0,12	0,099	-0,13	0,015	-0,05	0,007
30	0,099	0,126	0,037	0,293	0,443	0,283	-0,01	-0,11	0,112	0,096	0,03	0,1	0,138
31	0,259	0,328	0,181	0,13	0,149	0,044	0,34	0,135	-0,05	-0,09	0,104	0,111	-0,07
32	0,157	0,153	0,022	0,568	0,075	0,075	0,173	0,179	0,068	0,233	-0,12	-0,01	-0,07
33	0,055	0,03	0,126	0,237	0,18	0,027	0,518	-0,12	0,006	0,251	0,075	0,05	-0,01
34	0,061	0,136	-0,01	0,097	0,106	0,114	0,547	0,099	0,074	0,047	-0,03	-0,11	0,024
35	0,171	0,064	0,564	0,303	0,147	0,132	0,116	0,03	0,096	0,021	-0,04	-0,19	0,064
36	0,274	0,29	0,13	0,495	0,204	0,152	0,042	-0,03	-0,05	0,052	0,08	0,033	-0,06
37	0,166	0,597	0,039	0,308	0,09	0,113	0,096	-0,01	0,029	0,045	0,189	0,012	-0,05
38	0,195	0,072	0,128	0,544	0,194	0,016	0,072	0,158	0,125	0,056	-0,16	-0,22	-0,04
39	-0,01	0,026	0,083	0,046	0,105	0,763	-0,02	-0,02	-0,11	-0,02	-0,06	0,073	0,066
40	0,016	0,086	0,053	-0,01	0,014	0,685	0,112	0,071	0,02	0,02	-0,1	0,006	-0,01
41	-0,04	-0,04	0,018	0,029	0,035	0,669	0,01	0,083	0,052	0,061	0,076	-0,08	-0,14
42	0,007	0,029	-0,01	0,29	0,08	0,142	-0,23	0,199	0,04	-0,11	0,129	0,529	0,016
43	0,085	0,196	0,104	0,313	0,201	0,238	0,306	0,089	-0,01	-0,03	0,271	0,101	0,074

Table 3. Cont.)

Item	Component												
	1	2	3	4	5	6	7	8	9	10	11	12	13
44	-0,31	-0,24	-0,14	-0,21	-0,22	0,091	-0,11	0,102	-0,04	-0,12	-0,17	0,312	0,003
45	-0,28	-0,05	-0,02	0,053	-0,15	0,131	-0,17	-0,12	0,032	0,151	-0,31	0,076	-0,17
46	0,272	0,362	0,205	0,38	0,121	0,015	-0,03	0,028	0,063	0,115	-0,06	-0,05	0,015
47	0,132	0,48	-0,01	0,347	6E-04	0,05	0,266	0,134	-0	0,051	0,105	0,017	-0,05
48	0,257	0,309	0,14	0,256	0,18	0,173	0,186	0,336	-0,04	0,007	0,228	0,033	-0,18
49	0,139	0,175	0,045	0,033	0,067	0,078	0,005	0,611	-0,15	0,005	-0	-0,05	0,039
50	0,134	0,517	0,116	0,181	0,224	0,067	0,223	0,034	-0,02	0,03	-0,17	-0,04	0,087
51	0,207	0,543	0,152	-0,08	0,098	0,028	-0,04	0,231	0,284	0,103	0,095	-0,07	0,026
52	0,065	0,031	0,059	0,278	0,123	3E-04	0,132	0,56	0,095	0,056	0,034	0,019	-0,01
53	0,416	0,271	0,282	0,263	0,137	0,021	0,008	0,083	0,247	0,029	-0,04	-0,03	0,054
54	0,035	0,391	-0	3E-04	0,028	-0,18	0,301	0,232	0,139	0,046	-0,25	0,097	0,225
55	0,212	0,15	0,094	0,042	0,04	-0,03	0,418	0,184	-0,03	0,01	0,031	0,048	0,078
56	-0,49	-0,16	0,138	-0,11	-0,13	0,052	-0,05	-0,05	-0,27	-0,16	-0,21	0,167	-0,22
57	0,076	0,073	-0,08	0,237	0,03	-0,25	-0	0,398	0,126	0,472	-0,15	-0,05	0,103
58	-0,11	-0,06	-0,05	0,01	0,035	0,246	0,007	0,037	-0,06	-0,13	-0,56	0,063	-0,07
59	-0,38	-0,03	-0,05	0,004	-0,26	-0,08	-0,27	-0,09	-0,14	0,24	-0,08	0,242	-0,01
60	-0,67	-0	0,013	-0,04	0,046	-0,02	-0,21	-0,07	-0,12	-0,1	0,014	-0,02	-0,02

clinical interviews with patients reporting emotional, cognitive-mnestic, and volitional problems, as well as behavioral and eating disorders linked to work-related stressors. Additionally, the items from prototype burn-out assessment tools, including the Maslach Burnout Inventory , SVF-120 , the Personal Resources Loss and Gain Questionnaire, Q-LS-Q, the Chaban Life Quality Assessment, and the Copenhagen Burnout Inventory, were involved.

The questionnaire includes completion instructions and explains the assessment purpose. Responses were scored dimensionally to reflect burnout severity.

“Yes” responses:

- 0 points: items 5, 10, 23, 44, 45, 56, 59, 60
- 5 points: item 2
- 3 points: items 28, 31
- 2 points: items 3, 6, 7
- 1 point: all others

“No” responses:

- 5 points: items 59, 60
- 3 points: items 5, 10
- 2 points: items 44, 45
- 1 point: items 23, 56
- 0 points: all others

The total score, ranging from 0 to 87, quantifies burn-out severity. The final item (post-60) provides additional insights for mental health professionals but is not included in psychometric calculations.

To evaluate the questionnaire’s ability to measure the theoretically identified burnout symptoms, its *construct validity* was assessed through exploratory factor analysis. Factor loadings of 0.3 or higher were considered sufficient, provided that other loadings tended toward zero (Table 3).

Factor analysis identified 13 factors; however, some contained too few items or lacked conceptual coherence. Following factor load analysis, 10 questions with the lowest weight were removed, leaving a 50-item questionnaire. Consequently, three factors (8, 12, and 13) were removed due to low item loading and inconsistent thematic structure. The final model retained 10 factors relevant to burnout:

1. **Professional Dissatisfaction**
2. **Emotional-Volitional Reactions**
3. **Fatigue and Lack of Time**
4. **Depersonalization and Derealization**
5. **Astheno-Depressive Symptoms**
6. **Anxiety Symptoms**
7. **Need for Solitude**
8. **Dissatisfaction with Financial Compensation**
9. **Desire for Increased Rest Time**
10. **Positive Moral Attitudes Toward Work Commitment**

Thus, the questionnaire, after calculating the criterion validity and making appropriate changes, consists of 50 questions) with a dichotomous response scale (“yes” / “no”) (Table 4)

Table 4. QUESTIONNAIRE FOR DETECTION OF BURNOUT SYNDROME (© Chaban O.S., 2025), (English Version*)

Nº	Statement	Yes	No
1	I am completely satisfied with my job.		
2	My job has clearly worsened my mental and physical health.		
3	The psychological atmosphere at work fully suits me.		
4	I feel that my work makes me more harsh, emotionally numb, and overly categorical.		
5	I feel a certain disappointment in my profession.		
6	The best time for me is Friday afternoon, anticipating rest from everyone and everything.		
7	I think I am overloaded at work more than others; I feel this is unfair.		
8	I am fully satisfied with my salary.		
9	My efforts at work are not adequately or fairly compensated (pay, days off, flexible schedule, etc.).		
10	My hobbies and interests have significantly decreased because I don't have time for them.		
11	My hobbies and interests have significantly decreased because I've lost interest in them.		
12	I often want to be alone and take a break from everyone.		
13	I feel I am losing enjoyment in my work.		
14	I often feel "like a squeezed lemon" or "a drained battery" after work.		
15	My sleep is disturbed (difficulty falling asleep, fragmented sleep, early waking, no rest).		
16	Communication at work has become more formal; warmth and trust have disappeared.		
17	I think I work too much.		
18	My family and friends think I work too much.		
19	Working with people increasingly exhausts me; I want solitude or to live in the countryside.		
20	I worry a lot when something doesn't work out at work.		
21	Sometimes I "zone out" at work, thinking about nothing, as if in a stupor.		
22	After work, I keep thinking about work, replaying conversations with colleagues/bosses.		
23	I lose pleasure in everyday life (food, rest, sex, fun, friends).		
24	I've become more anxious and worried about everything.		
25	I feel my job dulls my emotions; I've become dry, emotionally flat, and stopped joking.		
26	My work efficiency depends on my mood.		
27	After coming home, I need time alone without communicating with anyone.		
28	I feel most understood only by my pets (dog, cat).		
29	I constantly feel like there's not enough time for anything, including home duties.		
30	Ordinary situations at work cause me excessive emotions and irritation.		
31	My mood worsens when I think of certain colleagues or managers.		
32	Lately I procrastinate and put off work tasks without any real reason.		
33	I worry a lot about my job.		
34	I fear losing my job and therefore work during off-hours, weekends, and vacations.		
35	I'm afraid of letting colleagues down, so I often help or cover for them.		
36	I start to feel anxious (heartbeat, shortness of breath, nausea) thinking about work.		
37	I feel happy when I see the real results of my work.		
38	I feel that something is wrong at work, but I don't understand what.		
39	I meet people at work who exhaust or irritate me so much that I even silently wish them harm.		
40	I've lost inner peace because of work and started swearing more, especially while driving.		
41	I used to be more open, attentive, and friendly with coworkers.		
42	I'm sure that management doesn't care about people or their health.		
43	Sometimes I feel that my work results are not worth the effort I put in.		
44	I don't care much about coworkers' requests or emotional state – everyone's on their own.		
45	I'm disappointed in working with people and would gladly change to a job with less contact.		

Table 4. Cont.

Nº	Statement	Yes	No
46	I clearly see career prospects at my job and constantly learn and grow.		
47	If there's a chance to slack off or cut time on work, I do so without guilt.		
48	I admire people who fully dedicate themselves to their profession and gain recognition.		
49	Overall, I am a happy person.		
50	If I could go back in time, I would choose my profession again.		

* The questionnaire is an English translation of the original Ukrainian test, included in the publication solely for the purpose of familiarization with its structure and content. The English version of the test cannot be used for diagnostic purposes, since validation was carried out only for its Ukrainian version

Table 5. Keys of the Questionnaire for Identifying Burnout Syndrome (© Chaban O.S., 2025)

Item	Points for "YES"	Points for "NO"	Item	Points for "YES"	Points for "NO"
1	0	3	26	1	0
2	5	0	27	1	0
3	0	3	28	1	0
4	2	0	29	1	0
5	2	0	30	1	0
6	1	0	31	1	0
7	1	0	32	1	0
8	0	3	33	1	0
9	1	0	34	1	0
10	1	0	35	1	0
11	1	0	36	1	0
12	1	0	37	0	2
13	1	0	38	1	0
14	1	0	39	1	0
15	1	0	40	1	0
16	1	0	41	1	0
17	1	0	42	1	0
18	1	0	43	1	0
19	1	0	44	1	0
20	1	0	45	1	0
21	1	0	46	0	1
22	3	0	47	1	0
23	1	0	48	1	0
24	1	0	49	0	5
25	3	0	50	0	5

KEYS AND INTERPRETATION OF THE RESULTS OF THE QUESTIONNAIRE FOR IDENTIFYING BURNOUT SYNDROME (© CHABAN O.S., 2025)

The evaluation follows a dimensional approach, considering the weight and significance of individual self-assessments (responses) in the development and/or manifestation of burnout syndrome. The final result is determined by calculating the total sum of points scored (Table 5).

INTERPRETATION OF THE QUESTIONNAIRE RESULTS

- **0 – 5 points** – No signs of burnout detected. Maintain your current professional strategy, work-life balance, and rest regimen.
- **6 – 21 points** – Low risk, but there is a possibility of developing burnout syndrome. Self-reflection and monitoring for early signs are recommended. Pay attention to psychological hygiene and the

mental ecology of your professional activities. Enhance your knowledge of burnout, its causes, and consequences.

- **22 – 59 points** – Moderate probability of developing burnout syndrome. A consultation with a mental health professional is advisable, such as a family doctor, internist, psychologist, clinical or medical psychologist with expertise in mental health and burnout syndrome. It is recommended to take a responsible approach to your work environment, rest, and burnout prevention strategies.
- **60 – 75 points** – High likelihood of developing burnout syndrome. Consultation (additional assessment) with a mental health specialist, preferably one with expertise in medical psychology, psychotherapy, and/or psychiatry, is necessary. Attention to your health and workplace relationships is strongly advised, as there is a high risk of developing psychosomatic disorders.

DISCUSSION

The discriminativeness of the questionnaire was determined by calculating the coefficient δ – L. Ferguson. As a result of the analysis, it was found that the discriminativeness of the questionnaire is very high (δ -Ferguson=0.988), which indicates the high ability of the test to distribute respondents according to the level of emotional burnout. The reliability of the questionnaire was determined by calculating its consistency and synchronous reliability. The indicators that assess the consistency of the questionnaire during statistical analysis turned out to be very high: α -Cronbach = 0.877; Guttman split-half = 0.848; Equal-length Spearman – Brown = 0.857. This indicates high reliability and internal consistency of the method. The only exceptions were questions 33 ($r = 0.244925$; $p = 4.86E-08$), 35 and 48 ($r = 0.21011$; $p = 3.53E-05$), which, with an extremely high level of statistical significance, had a low level of positive correlation with the final score of the questionnaire. Thus, the synchronous reliability of the questionnaire can be considered acceptable.

During the development of the questionnaire, the assessment of the competitive validity of the test in comparison with similar English-language tests that were adapted for use in Ukraine and have acceptable psychometric characteristics was not carried out due to the lack of adapted derivative tests, and the questionnaire presented by the authors is the first Ukrainian scale for diagnosing burnout.


In terms of content, the questions of the developed test contain symptoms of emotional burnout, according to the concept of K. Maslach, S. Jackson [4]. Comparison of the psychometric characteristics of the questionnaire with the corresponding characteristics of burnout tests developed in the USA (MBI, Maslach C. & Jackson S.E.; UWES, Schaufeli W. & Bakker A.) [4, 5], Sweden (SMBM, Shirom A. & Melamed S.) [6], Australia (SBM, Parker G. & Tavella G.) [7], the Netherlands (OLBI, Demerouti E & Bakker AB) [8], Denmark [9] and Russian-language tests (MDUPV, Boyko V.V.) [12] indicate that the indicators of our new questionnaire are not inferior to similar tests developed in other languages and in other socio-cultural regions.

CONCLUSIONS

Thus, after calculating the criterion validity and implementing the necessary modifications, the final version of the questionnaire consists of 50 items with a dichotomous response scale. Validation of the developed questionnaire confirmed its strong psychometric properties. It demonstrates a high capacity to differentiate respondents based on the severity of burnout, as evidenced by its strong discriminatory power. Additionally, the high internal consistency of the questionnaire was confirmed by an exceptionally high level of reliability. Furthermore, the questionnaire exhibits an acceptable level of concurrent reliability.

All of the above indicates the feasibility of using the first Ukrainian “Questionnaire for Identifying Burnout Syndrome” (© Chaban O.S., 2025) in practical psychology, medicine, and burnout research.

REFERENCES

1. ICD-11 for mortality and morbidity statistics. <https://icd.who.int/browse/2025-01/mms/en#334423054> [Accessed 6 February 2025]
2. Freudenberger HJ. Staff Burn-Out. *Journal of Social Issues*. 1974;30(1):159–165. doi:10.1111/J.1540-4560.1974.TB00706.X.
3. Bradley HB. Community-based treatment for young adult offenders. *Crime & Delinquency*. 1969;15(3):359–370. doi:10.1177/001112876901500307. 
4. Maslach C, Jackson SE. The measurement of experienced burnout. *Journal of Occupational Behaviour*. 1981;2(2):99–113. doi:10.1002/job.4030020205.
5. Schaufeli WB, Bakker A. UWES. Occupational Health Psychology Unit Utrecht University. 2003, p. 60. https://www.wilmarschaufeli.nl/publications/Schaufeli/Test%20Manuals/Test_manual_UWES_English.pdf. [Accessed 11 February 2024]
6. Shirom A, Melamed S. A comparison of the construct validity of two burnout measures in two groups of professionals. *International Journal of Stress Management*. 2006;13(2):176–200. doi:10.1037/1072-5245.13.2.176.

7. Parker G, Tavella G. Burnout: a case for its formal inclusion in classification systems. *World Psychiatry*. 2022;21(3):467–468. doi:10.1002/wps.21025.
8. Demerouti E, Bakker AB, Vardakou I, Kantas A. The convergent validity of two burnout instruments: A multitrait-multimethod analysis. *European Journal of Psychological Assessment*. 2003;19(1):12–23. doi:10.1027//1015-5759.19.1.12.
9. Kristensen TS, Borritz M, Villadsen E, Christensen KB. The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & Stress*. 2005;19 (3):192–207. doi:10.1080/02678370500297720.
10. Moreno-Lucas JL, Martínez-Ramón JP, Morales-Rodríguez FM et al. Stress, Burnout, and Resilience: Are Teachers at Risk? *International Journal of Mental Health Promotion*. 2023;25(2):207–222. doi :10.32604/ijmhp.2023.025901.

The study was carried out within the scope of the scientific research work of the Department of Medical Psychology, Psychosomatic Medicine and Psychotherapy of the Bogomolets National Medical University «Proactive transdiagnostic medical and psychological assistance to the population of Ukraine affected by war distress (prevention, identification, treatment intervention, rehabilitation)» (2023–2025, No state registration 0122U202016).

The work was carried out on our own initiative; no external sources of funding were used to carry out the work.

CONFLICT OF INTEREST





The Authors declare no conflict of interests





CORRESPONDING AUTHOR





Oleg S. Chaban

Bogomolets National Medical University
13 Shevchenko Boulevard, 01601 Kyiv, Ukraine
e-mail: ocs@ukr.net

ORCID AND CONTRIBUTIONSHIP

Oleg S. Chaban: 0000-0001-9702-7629    

Olena O. Khaustova: 0000-0002-8262-5252    

Vitaliy Yu. Omelyanovich: 0000-0001-8587-1312    

 – Work concept and design,  – Data collection and analysis,  – Responsibility for statistical analysis,  – Writing the article,  – Critical review,  – Final approval of the article

RECEIVED: 09.01.2025

ACCEPTED: 29.04.2025

