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# BANI World: Coping Intelligence and Stress Management

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**ABSTRACT**

Relevance. Effective stress management in today's BANI world (fragile, anxious, non-linear, incomprehensible) requires coping intelligence (CI), enabling flexible adaptation to rapid changes. CI is the person's ability to resolve stress productively, maintain health, and develop across life domains. The objective of this study is to analyze CI manifestations among employees performing routine tasks. Methods. CI was assessed at psychological and socio-cultural levels. Psychological assessment included mental representation analysis of stress and the SACS questionnaire. Socio-cultural evaluation utilized the IDICS and the Maslach Burnout Inventory. The sample comprised is 331 employees (192 m./139 f.; mean age 34.9 ± 13.14) from two professional groups: IT call center operators and plant workers. Data were collected via these mixed methods and analyzed statistically. Results. The majority of employees experience stress, with 25% at high risk for stress-related illnesses. Psychological level of CI is that while respondents identify causes of stress and symptoms, they rarely acknowledge rest, health, or the positive developmental role of stress. Constructive coping strategies such as assertive actions and social support are common. Socio-cultural level of CI highlighted differences between groups: call center operators exhibit more complex stress representations and higher job stress vulnerability, whereas plant workers report lower professional self-esteem and high task-related stress, overlooking stress's developmental role. Conclusion. Representations of stress are the psychological correlates of individual differences of stress management in the BANI world. This study proposes three levels of individual stress management, such as simplified, differentiated, and systematic.

**Keywords:** *BANI world, coping intelligence, mental representation of stress, stress management, call center operator, plant worker*

## Introduction

Modern man lives in a BANI world (Cascio, 2020). The acronym BANI stands for Brittle, Anxious, Nonlinear, Incomprehensible. Brittleness is associated with a person's desire for maximum productivity and a high probability of sudden catastrophic events in the world. Anxiety manifests itself in a total sense of helplessness, fear of making the wrong choices, despair, passivity and chronic fatigue. Non-linearity emphasises the gap between human effort and disproportionate consequences. Incomprehensibility is related to the nature of events and decisions in an era of information overload; it confuses people and resembles travelling through a confusing maze. Living in a brittle, anxious, nonlinear and incomprehensible world is fraught with increasing psychological stress (Casio, 2020). Researchers are trying to understand how people from different communities can successfully cope with unpredictable situations, keep their lives in order, feel good about themselves and be productive?

The ancient Roman philosopher Lucius Annaeus Seneca answered some of these questions. The founder of Stoicism argued that being active, anticipating dangers and experiencing disasters builds character and trains the mind. A situation of serious illness also requires struggle: 'If you give up, you will fail; if you strengthen yourself, you will win' (Seneca, p. 148). Seneca urges anticipating future events: 'What can be foreseen with the mind should be foreseen' (Seneca, p. 196), but this recommendation is very limited in the BANI world.

Hardiness according to Salvatore R. Maddy ensures that challenging and stressful situations are transformed into opportunities. The author considers such attitudes of hardiness as engagement, control, and challenge at the individual and organizational levels. Individual manifestations of resilience include active engagement with people, things and contexts, control over events and the desire to learn from any experience. The organizational level of hardiness is related in the value of cooperation, trust and taking responsibility, creativity and seeking new solutions (Maddi, 2002). Maddi's theory of hardiness does not focus on the experience of coping with difficult life situations and control over events in BANI world is often impossible.

The concept of antifragility takes into account the realities of a chaotic world. Antifragility is a property of a system that favours its positive development in the face of disorder and uncertainty (Taleb, 2015). This concept emphasizes the role of optionality as a person's ability to make choices and the ability to choose from options. However, the psychological mechanism of antifragility remains unclear: how does a person perceive stressors, what is their experience of coping with them, how can they simultaneously remain resilient and relaxed in the midst of chaos?

## Multidimensional model of coping intelligence (CI)

The term CI refers to psychological event characterized by a person's ability to differentiate psychological defences and coping strategies in order to obtain useful results (Libina, 2008). It is also defined as efficient individual ways of managing life stress. Each coping strategy is characterized by primary and secondary cross-cutting parameter, and the cross-cutting parameter of the third level (Libin, 2017). However, this interpretation of CI does not imply the analysis of mental representations of stress which act as a key factor in the choice of coping strategies.

In the present paper the term CI is defined as a person's ability to effectively resolve stressful situations, maintain health potential and increase the potential for personal development (Volkova & Kuvaeva, 2023). In multidimensional model the CI should be analyzed at three interrelated levels of the stress-coping system - biological, psychological and socio-cultural (Kuvaeva & Volkova, 2022):

- Biological level - genetic prerequisites, biochemical and neural markers of stress response.
- Psychological level - psychological characteristics of the subject, mental representations of stressful situations, coping resources and behavior strategies.
- Socio-cultural level - contextual factors that determine the perception of difficult life situations and the choice of behavior strategies.

*Biological level of CI*. A stable stress-coping system is associated with a balance of mineralocorticoid and glucocorticoid receptors, pro-inflammatory and anti-inflammatory cytokines, an optimal ratio of cortisol and dehydroepiandrosterone sulfate, sufficient BDNF levels and a healthy microbiota (Kuvaeva & Volkova, 2024). The balance of the autonomic nervous system is that the sympathetic system fulfils a stimulatory function, preparing the body to meet a stressful situation while the parasympathetic system is responsible for relaxation and energy storage (Dagnino, 2024). The genetic predisposition, unfavorable epigenetic factors and the action of chronic stressors determines the risk of stress-related diseases (Kuvaeva & Volkova, 2024). The expression of coping strategies 'discharge' and 'distraction' differs depending on the genotype of catechol-o-transferase (COMT) (Volkova et al., 2024). We continue to study the biological manifestations of CI under experimental conditions, and the results will be presented in publications soon.

*Psychological level of CI*. It is a mediating link between the biological and socio-cultural levels of the stress-coping system. This level of CI is associated with personality traits and experience of overcoming difficult life challenges and stressful situations. The experience of coping with stressful situations is accumulated and represented in memory in the form of mental representations. Differentiation and integration processes in the brain provide multidimensional assessment of a stressful situation and choice of coping strategies.

We developed a specific procedure to assess mental representations of stress as the correlates of the CI (Volkova & Kuvaeva, 2023). The diagnostic tasks of this procedure are presented in Methods. Provisions of the Differentiation-Integration theory of development help to analyze the mental representations of stress. Differentiation of stress representations is the result of an individual's ability to analyze a stressful situation in meaningful categories. The hierarchy of mental representations of stress is defined as a person's ability to identify connections between significant attributes and meaningful categories of a stressful situation.

Traditionally we analyze such meaningful categories as (1) causes and (2) consequences of stressful situations, (3) physiological and emotional state, (4) process, and (5) management possibilities. In this study, there are three additional meaningful categories such as (6) rest and relaxation, (7) health and (8) development. The category of 'rest' relates to a person's understanding of the need to pause and recuperate in a stressful situation. The category 'health' is associated with signs of physical and mental well-being or ill-being (healthy, sick, insomnia, hysteria, fatigue, exhaustion, etc.). Health is an individual's value manifested in personal beliefs and priorities for taking care of one's health (Russian-Emirati dictionary of psychology, https://psychologydictionary.ae/).). The category 'development' denotes irreversible sequential changes leading to higher levels of differentiation and organization of the system. Individual development is a process of change and growth in physical, cognitive, emotional and social dimensions (Russian-Emirati dictionary of psychology, https://psychologydictionary.ae/).

Our earlier studies demonstrate that the differentiation of mental representations of stress significantly affects the demand for subjective strategies (problem solving, work/achievement, anxiety, self-harm) and non-subjective strategies (sense of belonging, religious support, professional help) (Volkova & Kuvaeva, 2020). The higher the hierarchy of stress representations, the greater the individual's need for independent resolution of the situation and the less he/she turns to other resources (Volkova & Kuvaeva, 2022).

*Socio-cultural level of CI.* This level involves the study of contextual factors that determine the perception of difficult life situations and the choice of behavior strategies. In this case, a person is a member of a group (social, professional, ethno-cultural, national, etc.). The socio-cultural level of CI reflects the collective experience of effective resolution of difficult situations (Volkova & Kuvaeva, 2023). The nation's CI is a measure of the nation's cohesion in overcoming global problems (Volkova et al., 2022). A cross-cultural study of mental representations shows that Russian students have different perceptions of stress and emphasize the chronic nature of stressful situations. Turks emphasize the difficulties of learning activities and worry about the future. Chinese students fix generalized attributes of stressful situations and the need to react quickly to their occurrence (Kuvaeva et al., 2017a). The more differentiated mental representations of stress are, the more differentiated and individualized coping strategies people choose (Kuvaeva et al, 2017b; Kuvaeva, 2018b). The key coping strategy for Russian students is self-blame. Collective effort is important for Chinese students in resolving difficulties. Religious support saves Turkish, Armenian and Tatar students from stress (Volkova & Kuvaeva, 2023).

A person is not only a representative of a certain cultural group but also an employee of a certain organization. Teachers who work with students in the classroom perceive their work tasks as more significant and experience higher professional stress compared to teachers working remotely (Kuvaeva, 2018a).Occupational stress is related to the differentiation of mental representations. Mental representations are more likely to include the meaningful category 'management possibilities' in workers with pronounced stress. Mental representations are significantly less likely to reflect the meaningful category 'management' in workers with moderate and high occupational stress (Kuvayeva, 2020).

telecommunication and computer technologies in their work. The job of call centre operators is an innovative monotonous job that involves routine work tasks with mandatory use of phone,

Each level of CI reflects the specific manifestations of the stress-coping system. The biological level of CI analysis relates to the physiological response to a stressful situation and health status. Overload and chronic stress can contribute to the development of stress-related diseases. The psychological level of SI analysis is associated with the measure of differentiation and hierarchy of stress representations that determine the choice of coping strategies. Individual stress management will differ depending on the meaningful structure of representations and the individual's ability to see stressful situations holistically. The socio-cultural level of CI analysis is concerned with the contextual factors that influence coping behaviour of a particular group. Belonging to the group or organization can provide resources and promote personal development but it can also be limiting and stressful. Stress management in an organization is aimed at identifying the factors that cause stress in employees and developing their CI.

## Purpose of the Study

The present study identifies manifestations of CI at the psychological and socio-cultural levels in employees of large Russian organizations. The results are useful mainly for distinguishing different levels of individual stress management depending on the differentiation and hierarchy of stress representations.

## Method Sample

Call centre operators and plant workers were participants in this study. Call center operators work in the leading IT-company in the Russian Federation. The plant's employees work at a large instrument-making plant.

Both groups work in monotonous working conditions. Factory workers perform traditional monotonous labor; they do not use

computer and digital technology. Both plant workers (Balamurugan & Selvalakshmi, 2019; De Almedia et al., 2017; Yadav et al., 2019) and call centre operators (Lin et al., 2009; Memon et al.,

2016; Sinaga & Nurjanah, 2022) experience stress at work.

The sample of call center operators and plant workers consists of 331 people:

- 138 call center operators advise clients on software for automating accounting and business management (81 men, 57 women; average age 24.40±2.77);
- 193 plant workers are engaged in the assembly, installation and adjustment of equipment (111 men, 82 women; average age 41.80±13.36).

Males predominate in each group; older people are more numerous among plant workers.

### Instrument

Manifestations of psychological and socio-cultural levels of CI were investigated. Manifestations of biological level of CI remain beyond our attention. The diagnostic set of assessment methods had the following components (see Table 1):

**Table 1. Variables under Study**

| Psychological level of CI | Socio-cultural level of CI |
|---|---|
| *Procedure for assessing mental representations of stress*<br>1. Measure of hierarchy<br>2. Measure of differentiation<br>3. Number of associations<br>4. Causes of stressful situation<br>5. Physiological and Emotional state<br>6. Consequences<br>7. Process of stressful situation<br>8. Management<br>9. Rest and relaxation<br>10. Health<br>11. Development | Integral diagnostics of occupational stress (IDICS)<br>Scale and subscale:<br>TV1. Risk factors and objective job constraints (4 subscales)<br>TV2. Subjective appraisal of job difficulties (4 subscales)<br>TV3. Job rewards and administration (4 subscales)<br>TV4. Acute-stress manifestations (6 subscales)<br>TV5. Chronic-stress manifestations (6 subscales)<br>TV6. Personality and behavioral deteriorations (4 subscales)<br>TV0. General stress index (summarizing score of indexes of scales TV1-TV6) |
| *Strategic Approach to Coping Scales (SACS) questionnaire*<br>1. Assertive actions<br>2. Social joining<br>3. Seeking social support<br>4. Cautious actions<br>5. Instinctive actions<br>6. Avoidance<br>7. Indirect actions<br>8. Antisocial actions<br>9. Aggressive actions | *Maslach Burnout Inventory (MBI)*<br>1. Emotional exhaustion<br>2. Depersonalization<br>3. Personal accomplishment |

1. The procedure for assessing representations of stress includes three tasks: 1) directed associative experiment (stimulus word - STRESS); 2) identification of stress research problems; 3) portrait of stress. In an association experiment, a research participant writes as many adjectives as possible that match the word "stress". The number of adjectives reflects a person's experience in overcoming stressful situations: the more adjectives, the richer the person's experience. The problem identification task requires the respondent to write down the problems that they think arise in the study of stress. The stress portrait is associated with visual representations of stress: the respondent draws stress reflecting its most important and essential attributes. The total time to complete the three tasks is 7 minutes. Analysis of mental representations is associated with the assessment of hierarchy and differentiation of stress representations (Volkova & Kuvaeva, 2023). The hierarchy of mental representations of stress is defined as a person's ability to identify connections between significant attributes of a stressful situation. Gradations of the measure of hierarchy: 0 - the answer is inadequate; 1- external causes and internal stressors, connections are not displayed; 2 - human state, connections are not displayed; 3 - connection of cause and human state (models and schemes fixing cause-and-effect relations in a stressful situation). Differentiation of stress representations is related with meaningful categories: (1) causes, (2) physiological and emotional state, (3) consequences, (4) process of stressful situation, (5) management, (6) rest and relaxation, (7) health, and (8) development. The more meaningful categories a person reflects, the higher the degree of differentiation of representations becomes.
2. The Strategic Approach to Coping Scales (SACS) questionnaire by S. Hobfoll was applied for assessing 9 models of human behavior in stressful situations. The strategies 'assertive actions', 'cautious actions' and 'avoidance' reflect the human activity in overcoming stressful situations. The strategies 'instinctive actions' and 'indirect actions' reflect open and hidden forms of influence on the stressful situation. The strategies 'social joining' and 'seeking social support' demonstrate a measure of constructive social interaction in overcoming difficulties, while 'antisocial actions' and 'aggressive actions' reflect unconstructive interaction with people in overcoming life problems.
3. Questionnaire of integral diagnostics of occupational stress (IDICS) was applied for assessment of different stressors, the state of workers and the negative consequences (Leonova, 2018). The identifying work stressors and the negative consequences provides a good description of CI in terms of a person's belonging to a particular professional group and organizational culture.
4. Maslach Burnout Inventory by K. Maslach and S. Jackson assesses such burnout symptoms as emotional exhaustion, depersonalization, and decreased levels of personal achievement. It is important to emphasize that burnout syndrome is a negative consequence of emotional overload and develops in workers who interact a lot with people. In this study, only call centre operators interact intensively with customers which may lead to the development of burnout syndrome.

Statistical methods of data processing include descriptive statistics, one-way ANOVA, and t-test. Data were analyzed using SPSS 28.0.

## Results

### Psychological level of CI among employees of Russian organizations

Table 2 demonstrates that employees (n=331) analyze stressful situations highlighting their causes and the features of their physiological and emotional state. They rarely describe the consequences of stress and the process of development of a difficult situation, and even more rarely - the possibilities of management. Workers pay more attention to

attributes of distress (sick, sleepy, tired, etc.) than to personal development in overcoming difficulties. The majority of respondents (97.4%) do not indicate the need for rest and relaxation in stressful situations. A small number of respondents (7%) think about stressful situations as a source for development and growth. In stressful situations employees use such coping strategies as social joining, seeking social support, cautious and assertive actions. They are less likely to apply such non-constructive strategies as indirect and instinctive actions.

Table 2. Descriptive statistics of psychological level of CI (n=331)

| Variables | Min | Max | Mean | Standard deviation |
|---|---|---|---|---|
| The procedure for assessing mental representations of stress | | | | |
| Number of associations | 0 | 17 | 4.45 | 3.78 |
| Causes | 0 | 4 | 0.56 | 0.88 |
| Physiological and emotional State | 0 | 6 | 0.62 | 0.86 |
| Consequences | 0 | 2 | 0.26 | 0.52 |
| Process | 0 | 2 | 0.13 | 0.40 |
| Stress management | 0 | 2 | 0.09 | 0.30 |
| Health | 0 | 7 | 0.71 | 1.16 |
| Development | 0 | 2 | 0.08 | 0.35 |
| Measure of differentiation | 0 | 9 | 1.66 | 1.77 |
| SACS questionnaire | | | | |
| Assertive actions | 12 | 28 | 20.42 | 2.97 |
| Social joining | 10 | 30 | 22.07 | 3.44 |
| Seeking social support | 9 | 30 | 21.39 | 4.18 |
| Cautious actions | 10 | 28 | 20.45 | 3.34 |
| Instinctive actions | 10 | 27 | 17.24 | 2.99 |
| Avoidance | 6 | 30 | 15.40 | 4.26 |
| Indirect actions | 6 | 28 | 16.28 | 3.97 |
| Antisocial actions | 6 | 27 | 13.63 | 4.40 |
| Aggressive actions | 6 | 28 | 14.57 | 4.95 |

Analysis of the hierarchy of mental representations showed that a third of the participants (34.1%) identify the causes of stressful situations, and a quarter of the participants (26.9%) record the attributes of a stressful state. A high hierarchy of mental representations was found in 16.9% of respondents; they depict stressful situations in models and schemes that reflect cause-and-effect relationships. One in five study participants are unable to portray stress.

Table 3. Descriptive statistics of socio-cultural level of CI (n=331)

| Variables | Min | Max | Mean | Standard deviation |
|---|---|---|---|---|
| Questionnaire of integral diagnostics of occupational stress (IDICS) | | | | |
| General stress index (TV0) | 42.76 | 81.53 | 51.13 | 5.17 |
| Risk factors and objective job constraints (TV1) | 22.65 | 70.22 | 36.70 | 8.52 |
| Subjective appraisal of job difficulties (TV2) | 49.43 | 73.19 | 61.06* | 4.52 |
| Job rewards and administration (TV3) | 43.52 | 71.85 | 55.57* | 5.26 |
| Acute-stress manifestations (TV4) | 49.25 | 81.51 | 55.94* | 3.65 |
| Chronic-stress manifestations (TV5) | 37.74 | 91.30 | 48.34 | 7.27 |
| Personality and behavioral deteriorations (TV6) | 31.48 | 91.00 | 44.64 | 7.33 |
| Maslach Burnout Inventory (MBI) | | | | |
| Emotional exhaustion | 0 | 46 | 17.63 | 9.95 |
| Depersonalization | 0 | 26 | 6.26 | 4.99 |
| Personal accomplishment | 0 | 48 | 28.51 | 8.90 |

**Differences in CI between call center operators and plant workers**

The psychological level of CI in call centre operators is represented by a greater number of attributes of stress (p=0.000) and higher differentiation of representations (p=0.000). Operators more often highlight causes and consequences of stressful situations, features of strain, stages of stress, health problems and opportunities for development (p=0.000). 62% of operators draw symptoms of poor health such as nervous breakdown, insomnia, fatigue, exhaustion, depression, exhaustion, overwork, lump in throat, etc. Operators perceive stressful situations as opportunities for development (13% of the group). One in four call centre operators has highly hierarchical mental representations of stress and is able to relate the causes and consequences of stressful situations. They often use assertive actions when resolving difficulties (p=0.028) and such non-constructive strategies as avoidance, instinctive, manipulative, aggressive, and antisocial actions (p=0.000). The socio-cultural level of CI in call centre operators is related to professional and organizational stressors, adverse functional status and negative consequences of stress. Overloads, low remuneration and total job control are stress factors for operators (p=0.000). The majority of operators (68.8 %) experience a pronounced level of occupational stress but one third of the group is at risk and has a high level of work stress. Operators experience chronic stress as well as personal and professional deteriorations (p=0.000). They feel emotionally exhausted, experience neurotic symptoms, depersonalization and have unhealthy habits.

The psychological level of CI in plant workers is characterized by low differentiation of mental representations of stress. Workers can only identify the causes and characteristics of the stressful state. They do not perceive stressful situations as a source of development and new opportunities. 23% of workers describe symptoms of poor health, such as blood pressure, nervousness, headache, weakness, etc. A third of workers do not paint a picture of stress, and only 11.4% of respondents depict stress as a cause-and-effect model.

The socio-cultural level of CI in plant workers is associated to the specificity of their work tasks (TV2, IDICS) (p=0.000) and higher professional self-esteem (p=0.000). The majority of workers (72.2 %) experience a pronounced occupational stress but only 17 % of the group has a high level of work stress. Plant workers experience more stress due to monotony (p=0.017), low job importance and social conflicts (p=0.000).

### Relationship of differentiation and hierarchy of mental representations of stress

The hierarchy of stress representations is related to the number of adjectives a person writes (F=5.455, p=0.005). The higher the hierarchy is formed the more a person displays stress attributes and has a richer experience of coping with stressful situations. Portraits of stress presented as causal models are most often depict the meaningful 'consequences' (F=1.003, p=0.005) and 'health' (F=8.604, p=0.000). Representations in the attributes of physiological and emotional stress are not associated with ideas about development in a stressful situation. While stress representations reflecting causes and the connection of causes and consequences are connected with the meaningful category 'development' (F=3.466, p=0.017).

The independent factor 'hierarchy of stress representations' was not associated with IDICS scores (p≥0.005).

### Discussion

As was pointed in the introduction to this paper the main factors determining overcoming life difficulties are a person's involvement and activity, willingness to take risks and anticipate difficulties, as well as independent choice. However, Seneca's philosophical reflections, Muddy's hardiness theory, and Taleb's concept of antifragility do not show the role of representations about stressful situations and their connection with stress management, health, and development.

The multidimensional model of CI takes into account the experience of overcoming stressful situations, which is reflected in the differentiation and hierarchy of mental representations of stress. These representations are psychological correlates of individual differences in CI. The essence of CI includes not only a person's ability to productively resolve stressful situations, but also conscious and meaningful management of health and personal development. Analysis of CI in employees distinguishes different levels of individual stress management depending on the differentiation and hierarchy of stress representations. There are three levels of individual stress management: simplified, differentiated, and systematic.

*Simplified stress management*. Poorly differentiated mental representations of stress are associated with simple stress management and emotional regulation. The person uses a narrow range of familiar methods to reduce overload and strain. If a particular method cannot be realized consistently, the person will abandon it. It should be emphasized that methods can be either constructive or non-constructive. This stress management is very fragile - if the load is high and recovery inadequate, psychophysiological breakdowns and health problems are guaranteed.

*Differentiated stress management*. Assessment of a stressful situation includes analysis of factors of social, professional and cultural context. Stress management involves awareness of different methods of load control, emotional regulation and health maintenance. The choice of stress management method is associated with the analysis of congruence of stress and coping resources. Seneca emphasized, 'he who is wise and does everything after mature reflection never tries to do anything beyond his strength' (Seneca, p. 195). In familiar situations, the individual demonstrates flexibility in coping behaviour, while in new and unfamiliar situations he or she demonstrates rigidity.

*Systematic stress management.* Differentiated and hierarchically organized representations of stress allow building a sustainable structure of individual stress management. Stress control, emotional regulation and health management depend on contextual factors, the individual's well-being and recovery capabilities. The individual relates the measure of his or her activity to the resources and speed of recovery from the stressor. If resources are insufficient for coping with a difficult situation, a person consciously chooses avoidance behavior. In other words, he/she aims at accumulating resources and preserving health potential rather than wasting them (asymmetry in N.N. Taleb's terms). High hierarchy of stress representations provides non-situational analysis: a person identifies risks for health and work, opportunities for development and growth. Stress management is associated with flexibility, variability and a wide repertoire of strategies for coping with stress load.

Stress is not just a personal experience. Stress management is not just a concern for each individual. Since a person is involved in professional activities, overload and high stress at work are red flags for the organization. Our research shows that working in a call centre is more stressful and unhealthy than working on an assembly line. Both call centre operators and factory workers analyze stressful situations, identifying the causes of their occurrence and the characteristics of their state. Mental representations of stress rarely include rest, development, good health and management opportunities. They often identify signs of physical distress and rarely recognize the developmental role of stress. The risk group includes 22.4 % of participants who have a high level of occupational stress.

It should be emphasized that the employee's values and meanings play an important role in stress management. If the key values are professional activity and career growth, maximum productivity will be associated with overload (informational, emotional, cognitive, etc.), chronic fatigue and health problems. If a person is oriented towards work-life balance and development in different spheres, the organization of life should include daily rest and health care, which become important factors for a productive life in an unpredictable world. Recent research suggests that health awareness helps people cope more effectively with psychological stress in a BANI World (Johnson & Thompson, 2023).

## Implication for practice

### *Recommendations for observed organization*

Recommendations are based on the results describing different manifestations of CI. Firstly, the most important area is a training in techniques of acute tension reduction and emotional regulation. Effective self-regulation is fundamental skill in stress management. Secondly, developing an attitude about the positive and developmental role of stressful situations improves psychological well-being in the long term. Thirdly, emphasizing the value of health and a proactive recreation planning are consistent with a healthy lifestyle and the prevention of stress-related diseases. Finally, stress analysis training increases employee awareness and enables them to assess the risks of a particular problem to their physical and mental health.

High workload is a major stress factor for call center operators. A special recommendation for them is to reduce the workload. Organizational intervention may include switching to a four-day work week. The social impact of a four-day workweek is positive but the economic impact of such a work schedule is predominantly negative (AlOwais & Mir, 2023).

Specific recommendations for reducing stress in plant workers include: (1) improving relationships between employees, (2) increasing the variety and complexity of work tasks, and (3) strengthening professional self-esteem.

### *Simulator for the development of CI*

The development of CI should follow a path of increasing differentiation and hierarchy of mental representations of stress. The innovative technology will include tasks for detailing stressor attributes, meaningful categorization, establishing analogies or differences, probabilistic assessment, and identifying causal relationships. Training will take place in the zone of the nearest human development (according to the terminology of L. Vygotsky). New elements will be in each task and a person will learn to use existing

knowledge and gain new knowledge about managing a stressful situation. If a person achieves high accuracy, fast speed, ease and reliability in completing tasks, he/she will have moved to the next level of training. The result of the training will be more differentiated and structured mental representations of stress, which will contribute to productive coping with stressful situations. There will be two versions of stimulator for the development of CI - software and manual-pencil.

### *Personalized medicine*

Stress can be one of the major factors causing diseases. Patient's CI reflects the ability to relate the stress load to the capabilities of the body's regulatory systems and psychological resources. Different clinical and psychological features of fibromyalgia patients and manifestations of their CI were found in a complex load experiment (Teplyakova et al,, 2025).

Patient compliance is very important in maintaining health in chronic diseases. High compliance is the patient's accurate fulfillment of all the doctor's recommendations on the treatment of the disease, as well as the active implementation of preventive and rehabilitative procedures. A high level of CI based on differentiated and structured mental representations of stress helps the patient to adapt his/her life to the illness, to maintain health and compliance with treatment, and to develop in various areas of life.

## Conclusion

In the context of the contemporary BANI world, effective stress management necessitates consideration of an individual's coping intelligence - a comprehensive ability to cope and respond productively to rapidly changing external conditions. A high level of coping intelligence enables individuals to adequately balance workload with personal resources, accumulate positive experiences in overcoming challenges, and ensure harmonious development across various life domains. Consequently, coping intelligence represents a significant competitive advantage for employees and organizations alike. Practical stress management techniques grounded in a multidimensional model of coping intelligence can provide more flexible and effective adaptive strategies. The implementation of such integrative approaches holds promising prospects for enhancing psychological resilience and productivity amid the high uncertainty characteristic of the modern world.

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## References

Balamurugan, S. & Selvalakshmi, M. (2019). Techno stress and job engagement among employees: A study on textile industry sector. *International Journal of Advanced Science and Technology, 28*(19), 960-966. http://dx.doi.org/10.2139/ssrn.3743635

Cascio, J. (2020) Facing the Age of Chaos. https://medium.com/@cascio/ facing-the-age-of-chaos-b00687b1f51d

Dagnino, D.M. (2024). Rehabilitation biofeedback for stress management and individual well-being. *International Journal of Applied Technology in Medical Sciences. 3*(2), 4-8. https://www.emiratesscholar.com/system/publish/220125040118946.pdf

De Almedia, L.B., Vieira, E.R., Zaia, J.E., De Oliveira Santos, B.M., Lourenço, A.R.V. & Quemelo, P.R.V. (2017). Musculoskeletal disorders and stress among footwear industry workers. *Work, 56*(1), 67-73. https://doi.org/10.3233/wor-162463

Johnson, M. & Thompson, L. (2023). Psychological aspects of health values and stress management in a BANI world. *International Journal of Psychology, 58*(1), 23-35. https://doi.org/10.1002/ijop.12745

Kuvayeva, I.O. (2020). Concept of stress among workers with different levels of occupational stress. *Vestnik of Kostroma State University. Series: Pedagogy. Psychology. Sociokinetics, 26*(1), 112-117 (In Russian). https://doi.org/10.34216/2073-1426-2020-26-1-112-117.

Kuvaeva, I.O. (2018a). Teachers of special schools: stressors and manifestations of occupational stress.

*The Fifth International Luria Memorial Congress (Lurian Approach in International Psychological Science)*, *2018*, 515-521. https://doi.org/10.18502/kls.v4i8.3309

Kuvaeva, I. (2018b). The connection between representations of stress and coping strategies among youth. *The Fifth International Luria Memorial Congress (Lurian Approach in International Psychological Science)*, *2018*, 426-433. https://doi.org/10.15826/csp.2017.1.3.019

Kuvaeva, I., Achan, N. & Lozovskaya, K. (2017a). Stress representations in different cultures. *Voprosy Psikhologii*. 1. 68-81. (In Russian). https://www.researchgate.net/publication/318093079

Kuvaeva, I., Achan, N. & Lozovskaya, K. (2017b).University students: Connection between Representations of stress and Coping Strategies. *Changing Societies and Personalities, 1*(3), 94-108. http://dx.doi.org/10.15826/csp.2017.1.3.019

Kuvaeva, I.O. & Volkova, E.V. (2022). Biochemical Correlates of individual differences in coping intelligence. *Natural Systems of Mind, 2*(2), 18-34. https://doi.org/10.38098/nsom_2022_02_02_03

Kuvaeva, I.O. & Volkova, E.V. (2024). Neurochemical markers of coping intelligence. *Kazan Medical Journal, 105*(2), 260-271. (In Russian). https://doi.org/10.17816/KMJ623568.

Leonova, A.B. (2018). Integral diagnostics and correction of occupational stress (IDICS): methodological guide. St. Petersburg, research and production enterprise IMATON. 56 p. (In Russian).

Libin, E. (2017) Coping Intelligence: Efficient Life Stress Management. *Front. Psychol.*, *8*, 1-7. https://doi.org/10.3389/fpsyg.2017.00302

Libina, E. (2008). Coping intelligence: a person in a difficult life situation. Moscow: Eksmo. 400 p. (In Russian).

Lin, Y.-H., Chen, C.-Y. & Lu S.-Y. (2009). Physical discomfort and psychosocial job stress among male and female operators at telecommunication call centers in Taiwan. *Applied Ergonomics, 40*, 561 - 568. https://doi.org/ 10.1016/j.apergo.2008.02.024.

Maddi, S.R. (2002). The Story of Hardiness: Twenty Years of Theorizing, Research, and Practice. *Consulting Psychology Journal: Practice and Research, 54*(3), 173-185. https://doi.org/10.1037/1061-4087.54.3.173

Memon, M. A., Ting, H., Salleh, R., Ali, J. K. & Yakob, Y. (2016). Level of Stress and Job Satisfaction among Call Operators: A Case of Malaysian Telecommunication Sector. *International Review of Management and Marketing, 6*(3), 442-447. https://www.econjournals.com/index.php/irmm/article/view/2256

AlOwaisa, A.A. & Mirb, F. (2023) The social, economic and environmental impacts of a 4-day workweek in an organization. *Emirati Journal of Business, Economics, & Social Studies, 2*(2), 38-47. https://doi.org/10.54878/ejbess.102

Russian-Emirati dictionary of psychology. https://psychologydictionary.ae/

Seneca, L.A. (2022). Selected Works. Moscow: Eksmo, 608 p. (In Russian).

Sinaga, C. V. & Nurjanah, A. (2022). The Correlation between Years of Work and Work Shifts with Job Stress in Call Center Agents in the Surabaya Customer Service Company. *The Indonesian Journal of Occupational Safety and Health, 11*(1), 33-42. https://doi.org/10.20473/ijosh.v11i1.2022.33-42

Taleb, N.N. (2015). Antifragility. How to capitalise on chaos. Moscow: KoLibri, Azbuka-Atticus, 768 p. (In Russian).

Teplyakova, O.V., Volkova, E.V., Kuvaeva, I.O. (2025). Clinical and psychological features of patients with fibromyalgia: a case study. *Russian Journal for Personalized Medicine, 5*(2), 142-153. (In Russian.) https://doi.org/10.18705/2782-3806-2025-5-2-142-153.

Volkova, E. V., Kuvaeva, I. O. (2022). The Measure of Hierarchy of the Concept Stress and Copings in freshmen of Different Cultures. *Sibirskiy*

*Psikhologicheskiy Zhurnal - Siberian journal of psychology*, *86*, 48-65. (In Russian. English Summary). https://doi.org/10.17223/17267080/86/3

Volkova, E.V. & Kuvaeva, I.O. (2023). Coping intelligence: differentiation and integration approach. Moscow: Institute of Psychology of the Russian Academy of Sciences. 404 p. (In Russian). https://doi.org/10.38098/mng_23_0464

Volkova, E. & Kuvaeva, I. (2021). Stress Conceptualizing in Students of Different Cultures. *European Proceedings of International Conference on Education & Educational Science EpICEEPS*, 100-106. https://doi.org/10.15405/epiceepsy.21101.9

Volkova, E.V., Kuvaeva, I.O., Varlamov, A.V., Volkova, N.E., & Dokuchaev, D.A. (2024). Genotypes of polymorphic loci of the BDNF and COMT genes as factors of individual differences in coping intelligence. *Experimental Psychology*, *17*(4), 103-120. (In Russian). https://doi.org/10.17759/exppsy.2024170407

Volkova, E.V., Rusalov, V.M., Dokuchaevm D.A. & Volkova, N.E. (2022). Coping-intelligence of the nations. *Natural Systems of Mind, 2*(2), 5-12. https://doi.org/10.38098/nsom_2022_02_02_01

Yadav, G., Kumar, S. & Mishra, M. (2019). Stress among workers in diamond cutting and polishing occupations. *Indian Journal of Occupational and Environmental Medicine, 23*(1), 3-6. https://doi.org/10.4103/ijoem.ijoem_5_18