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GAINING KNOWLEDGE THROUGH UNDERSTANDING DISTRESS AND POSITIVE FACTORS IN SOCIAL ENVIRONMENTS

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Abstract

This research examines the opinions of public sector representatives regarding the distress they experience in everyday life. By identifying sources of stress, positive factors, and suggestions for stress reduction from various social environments, valuable data can be gathered and converted into knowledge. Determining the power of distress and estimating energy consumption (in kilocalories) in diverse social (work) environments can provide management, including politicians and leaders in work organizations, with insight into disruptive factors within various social (work) processes. This serves as a psychosocial barometer, reminding us that sensible decisions and corrective action may be necessary. The study presents estimates of distress power and energy consumption in kilocalories based on the opinions of civil servants in their everyday lives.

Keywords

knowledge discovery, distress power, social environments, work organizations, psychosocial barometers

Introduction

This research examines the opinions of public sector representatives regarding the distress they experience in everyday life. Defining stress presents a challenge akin to defining knowledge (Van Meter, 2020; Frické, 2019; Singh & Hetlevik; Gurukkal, 2019; Shieber, 2019; Bolisani & Bratianu, 2017; Zagzebski, 2017; Rezania & Lingham, 2009; Geisler, 2008; Zhu, 2008; Wickramasinghe & Von Lubitz, 2007; Müller-Merbach, 2004). Over the past 150 years, numerous theories and models of stress have emerged, each contributing only a portion to the puzzle (Cannon, 1932; Selye, 1956; Holmes & Rahe, 1967; McGrath, 1970; Lazarus, 1975; Levi, 1975; Beehr & Newman, 1978; Cummings & Cooper, 1979; Janke, 1985; Hemingway & Smith, 1999). These authors, among many others not mentioned, have made significant contributions to understanding this complex issue. So, how can we define stress? We can take a holistic approach and define it as a natural process that can be examined from various perspectives, including physical, psychological, social, environmental, health, and biological factors. Stress can have both positive and negative effects on interactions and information processing within and outside the individual (in the environment/society).

Drawing upon selected theories, models, and classifications of stress, a new classification of factors has been developed, encompassing not only stress factors but also positive factors and suggestions for stress reduction (Janke, 1985; Lazarus, 1975; Levi, 1975; Boucsein & Ottmann, 1996). Many existing classifications focus solely on one or two aspects

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and overlook positive events or fail to prompt survey participants to actively consider and provide constructive suggestions for mitigating stress factors. The aforementioned classification holds significance for the research as it enables the organization of respondents' negative, positive, and suggested opinions into six unified categories (six units for stress factors, six units for positive factors, six units for suggestions). This facilitates the transformation of unstructured descriptive opinions into structured data, which can then undergo statistical processing and calculation of total stress power, as well as individual types of stressors, positive factors, and constructive suggestions. Specifically, the computation or estimation of energy consumption derived from the calculated stress power data can furnish management with feedback regarding the amount of energy expended in kilocalories. Additional details regarding the classification and calculation will be provided later.

Literature review

Most survey studies in the field of stress measurement have concentrated on stress within various domains, including the family, economic/financial, managerial, organizational, job-related, occupational, psychosocial, health, and environmental spheres.

In the field of stress measurement within the family context, the Parenting Stress Scale (Berry & Jones, 1995) is particularly noteworthy. This scale captures both the joys and demands of parenting and consists of 18 items—10 assessing stress-related aspects and 8 assessing positive aspects. Respondents indicate their level of agreement using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree) (Nielsen et al., 2020). A comprehensive review of the application and interpretation of the Parenting Stress Scale is available in Louie et al. (2017). Other studies on family-related stress measurement have explored various dimensions such as family relationships (e.g., stressors related to time constraints, role overload, and internal/external resources), employment (e.g., psychological stress from holding multiple jobs), and post-traumatic stress (e.g., experiential avoidance) (Dotterer et al., 2020; Mellor & Decker, 2020; Lewis & Loverich, 2019).

Numerous studies have investigated economic and financial stress in work environments, focusing on severe and chronic stressors such as job insecurity, interpersonal conflict, workload, organizational constraints, and work-home interference. These stressors are often measured using a six-point frequency scale (1 = less than once per month or never to 6 = several times per day). Analytical methods include correlation analysis, confirmatory factor analysis, hierarchical regression, cost calculation, and latent moderation structural equation modeling (Siu et al., 2020).

Von der Warth et al. (2020) conducted a review on the economic burden of post-traumatic stress disorders (PTSD), which included 13 cost-of-illness studies and 18 economic evaluations. PTSD represents a significant public health concern with high associated healthcare costs.

A related study examined the financial burden of caregiving for elderly individuals and its effects on employees' emotional exhaustion at work. This study assessed three variables: financial burden (independent), emotional exhaustion (dependent), and job stress (mediator). The measurement instruments included six items rated on a five-point Likert scale, while emotional exhaustion was assessed using a seven-point scale (Ghaffar, 2020).

Another notable study on moral stress among high-level decision-makers focused on the emotional toll of making morally difficult decisions. Participants responded to questions based on personal experiences using a five-point Likert scale (Ames et al., 2020). Similarly, Gligorovski, Mancheski, and Angeleski (2018) conducted a descriptive analysis of managerial stress, based on qualitative responses and a seven-point Likert scale. Their findings suggest that

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stress significantly affects managerial decision-making, cognitive functioning, and overall work performance.

Research by Jäppinen et al. (2021) assessed stress among nurse managers, linking workload-related stress with job satisfaction and the practice environment. The Nurses' Context Index was used, comprising 78 items organized into three constructs—job stress, job satisfaction, and support for person-centered care—measured on a seven-point Likert scale. Results indicated that nearly one-fifth of nurse managers experienced high workload stress, which correlated with increased overall job stress.

Surveys assessing organizational, occupational, and job-related stress often focus on subjective perceptions and opinions (Fischer & Riedl, 2018). Within organizational psychology, emerging paradigms such as positive psychology have gained traction for their emphasis on both negative and positive experiences in the workplace. These approaches often aim to reduce distress through preventive strategies (Dewe & Cooper, 2021).

One widely used instrument is the Management Standards Indicator Tool, which evaluates psychosocial risk factors through 35 items across seven dimensions (e.g., demands, control, support). Responses are given on a five-point Likert scale, tailored to the type of question (Wood et al., 2019). Other organizational indicators of work-related stress involve numerical coding of data on injuries, sick leave, and absenteeism (Barbaranelli et al., 2018).

Research on occupational stress management often uses multidimensional tools to assess stress coping strategies across professions (e.g., academia, law enforcement, military, healthcare) (Du Plessis & Martins, 2019). An example is Grant and Ferris (2012), who employed literature reviews and interviews, followed by text analysis, to identify occupational stressors.

Studies on psychosocial stressors at work often use job content questionnaires and psychosocial well-being indices, analyzed through statistical methods (Mittelmark, 2016). Similarly, health-related stress measures typically involve self-reports, life event checklists, and behavioral coding (Crosswell & Lockwood, 2020), often combined with physiological indicators such as hormone levels and blood pressure. Early studies such as Michaux et al. (1967) utilized binary coding systems to categorize general and specific stress indices.

In reviewing survey-based stress research, it's worth noting emerging alternatives such as analyzing stress-related expressions on social media and spoken language (Karpasitis, 2020; König et al., 2021). These methods use textual analysis and offer a closer parallel to the approach proposed in this article.

Most traditional survey methods rely on predefined response formats (e.g., Likert scales, fixed statements), which may reduce participant cognitive engagement and yield only partial insights into the complexity of stress. While this approach may suffice for focused research questions, exploring complex systems such as workplace dynamics or diverse family settings often requires analyzing both stress and positive factors—especially their frequency, intensity, and interrelations.

The research presented herein, which focuses on the everyday stress experienced by civil servants, provides a comprehensive understanding of both stressors and protective factors. The same survey framework can be adapted to various work organizations (e.g., healthcare, police, military, education), occupational groups (e.g., musicians, scientists, politicians), or social contexts (e.g., patient families, ethnic minorities, different socioeconomic strata). In this way, the research contributes to the field of organizational psychology by not only identifying stressors but also highlighting strengths and offering constructive interventions to reduce the overall stress burden (Dewe & Cooper, 2021).

In many cases, research on stress using surveys is highly specialized in specific areas and relies on predetermined responses from motivated or prepared respondents. This approach

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often diminishes participants' mental engagement, resulting in only partial insights into the study of stress.

Method

Objective

The objective of this study is to assess the stress levels and energy consumption patterns of civil servants in their daily activities, to identify key stress hotspots and areas of inefficiency, thereby providing data-driven insights to support informed decision-making by leadership in diverse organizational settings.

Research hypotheses

This study comprised two research hypotheses. The research hypotheses were as follows:

1. Civil servants report that stress power and energy consumption in everyday life are extremely high.
2. The distress power and energy consumption in everyday life are not high overall, but certain factors are extremely distressing.

Research design

Based on online questionnaire, the research sample included 200 randomly chosen civil servants and scientists from various Slovenian ministries, faculties, schools, libraries, institutes, and municipalities within public sector. This study did not include public employees from the police, military, and healthcare sectors, as the nature and dynamics of their work warrant special attention. The survey was conducted in Slovenia in 2017. The criteria for the selection of these institutions included socio-demographic variables such as gender, age, employment status, and affiliation within the public sector.

Participants

As already mentioned, the opinions of civil servants employed within the public sector were obtained. The participants in this research were guaranteed informed consent, anonymity, voluntariness, confidentiality, as well as fair and respectful treatment.

Collection of data

With the assistance of online questionnaire software via email, the following data were collected through 11 questions (1KA, 2017):

a. gender, age and employment status (closed answers);
b. opinions on familiarity with the concept of stress, the problem of excessive stress in society, and the biggest stressors, frequency about stress situations (closed and semi-closed answers);
c. descriptive opinions on negative stress and positive impacts in the daily/working lives of civil servants within the public sector (descriptive answers);
d. descriptive suggestions for eliminating or preventing stress (descriptive answers);
e. descriptive comments on stress (optional descriptive answers)

Data on positive and distress (negative) factors and suggestions were important for this research. The classification of these factors and suggestions was done using the same classification units (but not together) as the attentive physical unit, the performance unit, the individual psychological unit, the partial social unit, the social unit, and the health-biological unit. This construct was chosen for its holistic perspective and the relationships between stressors and positive factors. For greater clarity, the classification method will be presented in the following table:

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Classification units	Negative stressors	Positive factors	Suggestions for reducing
Attentive (physical) unit	Harmful lightning	Optimal lightning	Protection with filters
Performance unit	Opacity of information	Easy search	Improved search engines
Individual Psychological unit	Anxiety on the workplace	Optimism on the workplace	Isolated space on work
Partial social unit	Stimuli of punishment	Feeling of reward	Symbolic rewards
Social unit	Overcrowding of people	Sufficient space	Prevention activities
Health biological unit	Infectious diseases	Healthy employees	Protection activities

Table 1. Classification of distress factors, positive factors and suggestions

Table 1 presents examples of distress factors, positive factors, and suggestions for reducing distress factors categorized into six units. Based on the categorized opinions of respondents, it was possible to obtain frequencies for individual types of factors and suggestions for reducing negative stress factors (Carleton et al., 2020; Minkkinen et al., 2020; Geuens et al., 2019; Nielsen & Dammeyer, 2019; VandenBerge, 2019; Harmsen et al., 2018).

In the following section, we examine the classification in greater detail, including examples organized by individual units.

Classification of negative stressors

1. Attentive (physical) negative stressors (hereinafter referred to as AtSF) are those that negatively impact the senses and, as a result, the well-being of employees, leading to negative effects on their performance of various activities (reducing or disrupting the level of attention of the employee, disturbances in concentration at work, etc.).

Light: Inadequate lighting (e.g., fluorescent lamps with a pronounced stroboscopic effect may cause headaches) can negatively impact an employee's well-being and performance. Reflective properties of computer screens can be mixed with spatial and sunlight, with distracting reflections on a longer employee exposure severely impairing their vision and intellectual concentration. The light emitted by computer screens must be adapted to the light in the room.

Noise: Noise in the workplace is extremely critical in terms of employee well-being and work effects, especially in intellectual work.

Sensory deficiency: With prolonged exposure to sensory stimulus deficiency in the workplace, the employee may fall into apathy, melancholy, or even feel depressed (strong predominance of one color, complete silence, twilight, etc.).

Climate: The appropriate temperature and relative humidity in the workplace are good prerequisites for proper employee mental concentration. If an employee feels that they lack energy, they will be more susceptible to the atmosphere in the room. The higher the temperature and the lower the relative humidity, the more tired the employee will feel. Unpleasant odors

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also have a negative impact on employees in the workplace (e.g., smell of sweat, smell of rot, etc.).

Ergonomic features of work equipment: Shelf heights should be well marked and not too high or low, chairs should be comfortable, and the appropriate height of tables is important.

2. Performance negative stressors (hereinafter referred to as StSF) are those that cause employees to expend too much or unnecessary effort, resulting in a loss of time and energy. Examples of performance negative stressors include: shifting extremely large loads. Education and training of employees based on inadequate teaching aids; unavailability and inaccuracy of information (e.g., the employee is extremely tense, but the desired information does not come, even though it is urgently needed, no access to computers and the Internet, the employee has to wait too long for accurate information, too much effort, etc.); complex administrative procedures.

3. Social negative stressors (hereinafter: SoSF) are those that negatively impact interactions between people and the organization of work in work organizations. Examples include: too many employees per square meter in the workplace, which can lead to overcrowding and hinder productivity; interpersonal problems (e.g., constant conflicts between the employee and the manager, mobbing, harassment).

4. Partial social negative stressors (hereinafter: PSSF) are either those that arise from an individual and are related to social norms and goals, or those that reflect social norms and goals on the individual and adversely affect employees. Examples include: stimuli of punishment, such as the employee feeling an additional burden at work without a reward, can be perceived as injustice; stimuli of proving one's own personality, such as the employee wanting the greatest possible social recognition and wanting to get as much quality information as possible in the shortest possible time, can lead to ineffective planning strategies.

5. Individual Psychological Stressors (hereinafter IPSF) are already present in an individual; they are subjective, such as negative experiences and feelings, and can negatively affect an individual's psyche, making them more susceptible to environmental stimuli. Examples include: crowding (e.g., the employee feels cramped); anxiety (e.g., fear of a leader or co-worker); internal tension (e.g., an employee needs important information to deal with complex work problems); constant rush (e.g., an employee performs all things at the last minute).

6. Health-related stressors (hereinafter: HBSF) are those whose disease-causing agents (e.g., viruses) are either already present in the workplace or can be transmitted and thus can have a negative impact on the physical health of people in the workplace. Examples include: spatial and personal hygiene (e.g., the workplace should not be very dirty and there should be no dust - dust allergies, etc.); Infectious diseases of a specific employee (e.g., skin diseases, influenza, epidemics, etc.); infected work inventory (e.g., documents, tables, chairs, etc.).

Classification of positive factors

1. Attentive physical positive factors (hereinafter AtPF) are those that have a positive effect on the senses and thus on the well-being of employees, resulting in positive effects in various activities, such as an increase in the level of attention in people. For example, a pleasant climate can stimulate an employee's intellectual ability at work and/or learning. Examples include: light (optimal lighting, protected computer screens, etc.); noise (unobtrusive but pleasant music, pleasant sounds from nature, etc.); climate (appropriate room temperature, adequate humidity, pleasant smells in the workplace, etc.); relative sensory diversity (colorful colors, pleasant sounds, etc.); ergonomic features (comfortable chairs, easily accessible work shelves, etc.)

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2. Performance positive factors (hereinafter referred to as "StPF") are those that facilitate the efforts of users, thus saving them time and energy. Examples include: easy search for valuable information (e.g., the employee quickly finds the desired information); accessible and up - to - date information (e.g., possibility to access the Internet, a computer catalog, the employee does not have wait long for an answer or document, an efficient working communication system); physical activities that trigger a pleasant feeling; adequate opening hours for services (e.g., a citizen wishes to visit an office with a favorable opening time, therefore saving himself many energy and time so that he does not have to wait for several hours or even days).

3. Socially positive factors (hereinafter referred to as SoPF) are those that positively influence interactions between people and the organization of work in a work organization. Examples include: there should be sufficient space for employees in the workplace (e.g., not overcrowded); there should also be friendly interpersonal relationships (e.g., a friendly and cooperative attitude of the manager towards employees, providing quality, timely, and accessible information, organizing courses and events, and promoting social interactions).

4. Partial social positive factors (hereinafter: PSPF) are either those that arise from the individual and are related to social norms and goals, or those that social norms and goals imprint on the individual and have a positive effect on users. Examples include: reward stimuli, such as the manager praising the employee, can be felt as a reward; stimuli of proving one's own personality, such as the employee being highly motivated in searching for information due to mastering relevant search strategies, can strengthen their sense of competence.

5. Individual psychological positive factors (hereinafter referred to as IPPF) are already present in the individual. They are subjective and specific to each person, such as positive experiences and positive feelings, which can be strengthened by stimuli from the environment, according to the individual's subjective interpretation. Examples include: optimism; internal relaxation (e.g., a place where an employee can drink juice or eat a snack, read newspapers, etc.); calmness and orderliness; personal satisfaction (e.g., the employee has found the appropriate document and feels pleasure personally).

6. Health positive factors (hereinafter: HBPF) are those that have a positive effect on the physiological health of people in the workplace. Examples include: healthy employees (e.g., no infectious diseases); health-friendly inventory; exemplary spatial and personal hygiene of employees (e.g., not much dust in offices, so that it can also accommodate people with allergies to dust).

Classification of suggestions

Suggestions from individuals in everyday life or work organizations can provide knowledge on how to convert negative stressors into positive ones, as well as innovative solutions. These proposals are also classified, based on their potential impact on reducing negative stressors and increasing positive factors:

- according to attentive performance factors (hereinafter AtPR), such as improved lighting, adequately heated rooms, aromatherapy (scents), more comfortable chairs and tables at suitable heights, pleasant background music, better sound insulation in the library, adequate heating, plants with fragrant flowers, nature sounds, colored labels for organizing shelves (for a more pleasant appearance), and reduced communication through mobile phones (to reduce radiation and noise).
- depending on service performance factors (hereinafter StPR), such as simplification of the data retrieval system, additional instructions for easier use of online services, multiple document checks, improved catalogs for easier searching for valuable

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information, and different spaces for different purposes (that can be released by an employee), and special devices for lifting heavy loads.
- according to social factors (hereinafter referred to as SoPR), such as staff training in communication with users, training staff in rhetoric, prevention activities for overcrowding, more thorough staff selection at hiring, conducting research on staff friendliness to recruit more motivated individuals, and video surveillance of staff.
- according to partial social factors (hereinafter referred to as PSPR), such as at least symbolically rewarding employees.
- depending on individual psychological factors (hereinafter referred to as IPPR), such as providing isolated space for improved mental well-being, allowing individuals to arrange their own workspace, more space at the workplace to avoid feeling cramped, creating pleasant working spaces that feel homely, smaller spaces (individual sense of transparency and homeliness), and allowing employees to make the workplace more pleasant themselves.
- depending on health factors (hereinafter referred to as HBPR), such as preventing viral diseases and providing devices for controlling employee stress.

Results

Before addressing the main content of this article, the findings and insights from respondents' answers to supplementary questions—those not central to the core analysis—will be briefly presented.

a. Structure by gender - the most considerable number of respondents who completed the online survey questionnaire were female (137; 68.50%). There were significantly fewer male respondents (63; 31.50%).

b. Age groups (age to 20 years, age 21 to 40 years, age 41 to 60 years and age 61 years and more) - the age structure of the recruited respondents is considerably high. The most significant number of respondents comes from the second 21-40 years (62; 31.00%) and especially the third-age class 41-60 years (122; 61.00%).

c. Employment status - all respondents were employed (200; 100%).

d. Opinions on familiarity with the concept of stress - the majority of respondents were familiar with the concept of stress (196, 98,00%). Three respondents (1.5%) were not entirely sure about their familiarity with the concept, while only one respondent (0.5%) was unfamiliar with it.

e. Opinions about the problem of excessive stress in society

A total of 178 respondents (89%) of those who completed the online questionnaire, selected this answer. Seventeen respondents (8.5%), believed that excessive stress is only occasionally a major problem. Five respondents (2.5%), expressed the opinion that excessive stress does not represent a major problem for society. In summary, the majority of respondents believed that excessive stress is dangerous and should not be underestimated.

f. Opinions about the biggest stressors

In this question, where multiple answers were possible, respondents attributed the greatest stress intensity to fear (171; 85%). This was followed by stressors such as coercion (138; 69%), conflict (127; 63%), exertion (76; 38%), noise (39; 19%), and finally, unpleasant odors (18; 9%). The 'other' option was selected 40 times (20% of cases). Under this category, respondents most frequently listed stress factors such as: *'work is not stressful', 'the concept of stress is misused',* lack of self-confidence, poor communication, time pressure, overload, constant time constraints, workplace overload, self-imposed responsibility, the desire to have everything and more in material terms, worries, uncertainty, interpersonal relationships, chronic overload, inappropriate lighting, poor work habits, dissatisfaction with oneself, lack of respect for human dignity, inability to solve problems, lack of communication, financial situation, time

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pressure, dissatisfaction, bullying, helplessness, workplace mobbing, fast pace, ambitions, demands, expectations (both internal and external), lack of free time, excessive administration or bureaucracy, high taxes and fees, constant email notifications, continuous mobile phone availability, negative news, social relationships, negative workplace relations, demanding work without adequate rest, unsolvable workplace situations, anxiety, overwork, poor diet, too many obligations, change, unequal treatment, and poor, unjust, or corrupt relationships due to leadership, etc.

g. Opinions on the frequency of stressful situations

The majority of respondents believed that there are many stressful situations in everyday life (131; 65.5%). Sixty-two respondents (31.0%) felt that a large number of stressful situations occur occasionally. Six individuals (3.0%) believed that there are not many stressful situations in daily life, while one person (0.5%) chose not to answer, indicating they did not know. In summary, respondents are aware of the threat of stress and generally attribute significant influence to it.

h. Additional comments on the topic of stress and the study

Seventy-eight respondents (39%) provided additional opinions on the topic of stress. The most interesting responses will be briefly presented.

> *"It is necessary to recognize stress and burnout as conditions that require medical leave. When stress becomes excessive, the body also begins to fail—this can lead to serious health problems and extended sick leave. Supervisors should be educated about this—more humanity and kindness foster a sense of belonging, which in turn leads to greater productivity, satisfaction, and ultimately fewer sick days."*
>
> *"Stress management content should be incorporated into the educational process."*
>
> *"Stress is not the situation itself, but our perception of the event. It is important to look for the positive side in everything, find hobbies that bring joy, and embrace life with enthusiasm."*
>
> *"An active role of employers in addressing or alleviating stressful situations is desirable."*
>
> *"Laws should prohibit pornography, alcohol, racism, poverty, and child abuse. I want people to share more in order to reduce poverty, and to give out of empathy and compassion."*
>
> *"In my opinion, this is an extremely important issue that deserves significantly more attention in practice. It is essential to see each person as an individual with their own needs, desires, and struggles. I believe this problem is particularly pronounced in public sector, where there is a false impression that team-building events and personal meetings are being organized—when in reality, these are often merely formal events without genuine intent, and the individual is not the focus. In the public sector, I have the impression that the rate of sick leave is relatively high, especially among older employees, which is an indicator that something is not right."*

i. Descriptive comments on negative stress factors, positive factors, and suggestions for reducing negative stress factors

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This study gathered the opinions of civil servants, which were then transformed into numerical data in the form of frequencies using the classification method described earlier. The process of determining opinion frequencies was very simple. The frequencies were determined based on the occurrence of classified negative stress factors, positive factors, and suggestions for reducing negative stress factors. Additionally, it was possible to identify the frequencies of various types of opinions. This enabled the generation of structured data in tabular format, serving as a solid foundation for computing the stress power value for both overall and individual types of stressors. Moreover, utilizing stress power, it became feasible to calculate the expenditure or utilization of energy for civil servants in their daily lives. These calculations will be elaborated upon in greater detail in the results section to enhance clarity in presentation.

Empirical data from the survey on stress in everyday life involving public servants will be presented. Factors and suggestions for reducing negative stressors will be presented as abbreviations in the tables.

Positive factors: Attentive physical positive factors (AtPF), Individual psychological positive factors (IPPF), Partial social positive factors (PSPF), Social positive factors (SoPF), Performance positive factors (StPF), Health biological positive factors (HBPF).

Negative stress factors: Attentive physical negative stress factors (AtSF), Individual psychological negative stress factors (IPSF), Partial social negative stress factors (PSSF), Social negative stress factors (SoPF), Performance negative stress factors (StSF), Health biological negative stress factors (HBSF).

Suggestions for reducing negative stressors: Attentive physical suggestions (AtPR), Individual psychological suggestions (IPPR), Partial social suggestions (PSPR), Social suggestions (SoPR), Performance suggestions (StPR), Health biological suggestions (HBPR).

Positive factors	**fv**	**frv**
AtPF	25	**18**
IPPF	63	**48**
PSPF	49	**44**
SoPF	217	**180**
StPF	156	**129**
HBPF	21	**18**
Sum	531	**437**

Table 2. Positive influences on public servants in everyday life

Table 2 illustrates the count of positive (fv) and varied opinions (frv) expressed by public servants in their daily lives, categorized by individual factors and overall. Respondents addressing stress in daily life identified numerous positive factors, particularly within Social Psychological Factors (e.g., socializing with friends, entertainment, maintaining good interpersonal relationships at work) and Structural Psychological Factors (e.g., recreation, nature walks, yoga). Notably, civil servants and researchers associated positive factors more with the home environment (e.g., harmonious family relationships) than with the workplace (e.g., supportive colleagues). In summary, responses from stress research in daily life exhibit a relatively complex and less predictable nature.

The most frequently mentioned opinions regarding SoPF) include: good relationships with people, positive interpersonal relationships, good workplace relationships, professional relationships, family relationships, interpersonal connections, friendships, positive and genuine relationships, mutual cooperation, and support in problem-solving, as well as a stable family life and positive communication, etc. Respondents reflected on positive relationships with

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others primarily within the context of their home and work environments, with a stronger emphasis on the home setting.

The most frequently mentioned opinions regarding StPF include: spending time in nature, walking in the forest, recreation, sports and leisure activities, gardening, hobbies, gentle exercise, yoga, reading, swimming, and similar activities.

The most frequently mentioned opinions regarding IPPF include: well-being, positive self-image, mental and physical balance, peace, love, enthusiasm, lightheartedness, positive attitude, self-confidence, satisfaction, and positive thinking.

The most frequently mentioned opinions regarding PSPF include: a sense of achievement, an abundance of new information one must become familiar with, time pressure, professional success, appropriate and fair compensation, a sense of security, perceived respect, the awareness of having a job one deserves, being rewarded for one's success, and a sense of belonging.

The most frequently mentioned opinions regarding AtPF include: a peaceful environment, pleasant sunny weather, living away from urban noise, good food prepared and enjoyed in peace, and quality music.

The most frequently mentioned opinions regarding HBPD include: the fact of being healthy, good physical condition, a healthy environment, taking care of one's health through exercise, a good diet, and proper nutrition.

Negative stress factors	fv	frv
AtSF	17	13
IPSF	74	67
PSSF	61	54
SoSF	244	222
StSF	128	107
HBSF	19	17
Sum	543	480

Table 3. Negative stressors on public servants in everyday life

Table 3 presents the count of negative (fv) and diverse opinions (frv) regarding public servants in everyday life, categorized by individual factors and overall. The survey was marked by SoSFs dominance (e.g., unfriendly coworkers, workplace mobbing, harassment, conflicts with superiors). There was a relatively high diversity of opinion in the research on stress in public sector. Civil servants and researchers associated SoSFs more with the work environment than the domestic environment. This trend was even more pronounced in StSFs, which, according to the responses, are much more likely to occur in the workplace (e.g., workload, extremely tight deadlines, poor working conditions).

The most frequently mentioned opinions regarding SoSF include: aggressive communication, job loss, organizational cynicism, working with difficult colleagues, the loss of a loved one, threats from coworkers, mobbing, harassment, conflictual relationships, negative workplace relationships, unfair treatment by superiors, problematic partner relationships, long waiting times in the healthcare system, competitiveness, family issues, poor workplace relations, terrorism, and abuse of power by superiors.

The most frequently mentioned opinions regarding StSF include: short deadlines for completing work tasks, workload demands, being overburdened at the workplace, commuting to work, raising children, insufficient physical activity, lack of time for family, urgent and

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unexpected tasks, disorganized processes, insufficient time for relaxation, lack of time for hobbies, and poor working conditions.

The most frequently mentioned opinions regarding IPSF include: fear of not having enough time for everything, tension, negative emotions, discomfort, impatience, selfishness, insecurity, frustration, restlessness, gloominess, hysteria, psychological pressure, rejection of the given situation, worries, loneliness, existential fear, arrogance, and mental abuse.

The most frequently mentioned opinions regarding PSSF include: expectations, perceived threats from the environment, a sense of urgency driven by social status, low income, lack of influence, failure, a sense of inequality, constant time pressure, feelings of alienation among people, poor decisions leading to negative consequences, dishonest individuals, the pursuit of material goods for the sake of reputation, and the pace of life driven by the need for social recognition.

The most frequently mentioned opinions regarding AtSF include: noise, cold, pollution, weather conditions, speed of life, and poor nutrition.

The most frequently mentioned opinions regarding HBSF include: illness, lack of any diet, health problems, poor nutrition, harmful effects on animal health, death, serious illnesses in the family, health issues, fatigue, and physical exhaustion.

Proposals	fv	frv
AtPR	9	9
IPPR	69	61
PSPR	57	50
SoPR	159	143
StPR	131	112
HBPR	21	20
Sum	446	395

Table 4. Suggestions for reducing negative stressors faced by public servants in everyday life

Table 4 displays the count of suggestions (fv) and diverse opinions (frv) regarding public servants in everyday life, categorized by individual factors and overall. The largest number of suggestions pertained to social (SoPR) and performance (StPR) aspects. Suggestions from civil servants and researchers were notably numerous, extensive, and varied for everyday life. They primarily proposed measures to address social stressors (SoSF) in the workplace, with fewer suggestions for the domestic environment. This pattern was also observed for proposals regarding performance stressors (StSF).

The most frequently mentioned opinions regarding SoPR include: more social interaction with friends, an optimal economic standard for individuals, and sufficient autonomy at work—without constant fear of immediate job loss; living in smaller communities; family-friendly and flexible working hours; improved organizational climate and work organization; a more relaxed society; longer lunch breaks; decentralized decision-making; social security; teamwork; evaluating leadership candidates based also on their leadership and interpersonal skills; support from colleagues in the workplace—although this may be unrealistic, as they are often overburdened themselves; employing competent individuals with the necessary knowledge and experience; greater empathy from superiors; increased organizational focus on workplace climate; engagement in sports; leaders who perform tasks themselves before assigning them to others; socializing with friends; systemic reduction of the standard 40-hour workweek to fewer hours, for example, 30 hours per week; promoting a diverse daily routine

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that includes work-related and personal activities (family, leisure, exercise, etc.); well-trained management capable of leading people and organizing work; regular discussions about stress and coping with stress, both with professionals and peers in similar situations; and planned and structured approaches to addressing the root causes of stress.

The most frequently mentioned opinions regarding StPR include: a six-hour workday, aerobic exercise, reading, breathing exercises, daily relaxation or meditation, good working conditions, sufficient physical activity, physical and mental recreation, yoga, outdoor exercise, less time spent on the computer, fewer obligations, massage, continuous improvement of leadership, particularly in the areas of work and people management, adjusting working hours to meet the needs of young families, allowing employees to work shorter hours, relaxation techniques during work, more breaks and vacations, conscious regulation of workload, relaxing walks in nature, and gardening.

The most frequently mentioned opinions regarding IPPR include: CBT (Cognitive Behavioral Therapy), making good choices, allowing enough time for relaxation, not taking events too personally, psychological support, investing more in oneself, self-actualization, self-regulation, satisfaction with small things, greater emotional intelligence, self-confidence and a positive self-image, and awareness of managing stressful situations.

The most frequently mentioned opinions regarding PSPR include: a calmer pace of life, empathy, being empathetic towards others, avoiding negative and unnecessary situations, assessing at home which factors are stressful and eliminating them from life, praise and encouraging motivation, and improving the sense of rational time management.

The most frequently mentioned opinions regarding AtPR include: a more positive attitude towards the environment, listening to classical music, watching a good movie, and aromatherapy.

The most frequently mentioned opinions regarding HBPR include: Improving personal health, flowers, recognizing stressful situations and managing them, ensuring proper nutrition, taking care of health in the workplace, healthy eating, and establishing a support system for employees who find themselves trapped in a cycle of stress.

The calculation of distress power within societies (or with a narrower focus on work organizations) is divided into three levels, considering both the entire system and individual factors (Petrič, 2001). The calculation of distress power—a quantifiable representation of negative human stress—draws on an interdisciplinary theoretical slope model (See example or Figure 1 in the final chapter) to assess the cumulative and interactive effects of multiple stress domains. These include psychological, performance, attentional-physical, partial social, social, and biological health factors. This theoretical foundation supports the development of a holistic calculation method for distress power, enabling the assessment of individual and environmental stress burdens across multiple domains. The theoretical basis for the mentioned computational method lies in the assumption that a higher density, diversity, and complexity of opinions regarding negative stress factors and suggestions for reducing them result in a greater overall stress intensity (steeper slope).

First level:

$\rho_o = \frac{f_o}{N_o}$ Calculation of the density of opinions per person (ρo) (1)

f_o … frequency of all opinions; N_o… sample size or number of respondents

$C_o = \frac{f_o}{f_r}$ Complexity of opinions per person (C_o) (2)

f_o … frequency of all opinions; f_r … frequency of dissenting opinions

$C_E = \frac{f_o - f_E}{f_r - f_{rE}}$ Complexity of opinions within individual units (C_E) (3)

f_o … frequency of all opinions; f_r … frequency of dissenting opinions; f_E … frequency of all opinions

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of a given unit; f_{rE} … the frequency of dissenting opinions of a particular unit

Second level:

It is a calculation of the real factor (F_o). We compare the actual density and complexity of opinions with the theoretical density (ρ_t = 10 opinions per person) and theoretical complexity of opinions (C_t = 1 - the greatest possible complexity of opinions e.g. that as a result of 1000 opinions of respondents we get 1000 different). Real factors are calculated for negative stressors (SF), positive factors (PF) and for proposals (PR) in the direction of reducing distress impacts in work organizations or social environments.

$F_o = \frac{C_o \rho_o}{C_t \rho_t}$ Calculation of the real factor (F_o) (4)

Third level:

On the basis of three calculated real factors (negative stressors, positive factors and suggestions) we can calculate the strength of stressors in stress degrees (° S):

$\sigma_{oSF} = \arcsin \sqrt{\frac{F_{oSF} F_{oPR}}{F_{oPF}}}$ Calculation of the entire stress power (5)

σ_{oSF} … power of SF; F_{OSF}… real factor SF; F_{OPR}… real PR factor for SF reduction; F_{OPF}… real factor PF

The power of SF in °S by individual units of SF is calculated in a similar way, but in the first stage it is necessary to first calculate the K_E within individual units.

$\sigma_{AtSF} = \arcsin \sqrt{\frac{F_{PoSF} F_{AtPR}}{F_{PoPF}}}$ Attentive negative stressors (AtSF) (6)

$\sigma_{StSF} = \arcsin \sqrt{\frac{F_{StSF} F_{StPR}}{F_{StPF}}}$ Performance negative stressors (AtSF) (7)

$\sigma_{PSSF} = \arcsin \sqrt{\frac{F_{PSSF} F_{PSPR}}{F_{PSPF}}}$ Partial social negative stressors (PSSF) (8)

$\sigma_{IPSF} = \arcsin \sqrt{\frac{F_{IPSF} F_{IPPR}}{F_{IPPF}}}$ Psychological negative stressors (IPSF) (9)

$\sigma_{SoSF} = \arcsin \sqrt{\frac{F_{SoSF} F_{SoPR}}{F_{SoPF}}}$ Social negative stressors (SoSF) (10)

$\sigma_{HBSF} = \arcsin \sqrt{\frac{F_{HBSF} F_{HBPR}}{F_{HBPF}}}$ Health negative stressors (HBSF) (11)

Distress does not usually increase linearly, but rather grows slowly at first and then increases more or more intensely. For this reason, the inverse quadratic function or square root was used in the calculation. The inverse sine function (arcsin) was mainly used to obtain degrees as a result that can be effectively visualized.

$\rho_{SF} = \frac{f_{SF}}{N_o}$ (12)

Calculation of the SF density of opinions per person in everyday life

$\rho_{SF} = \frac{543}{200} = 2{,}71$ opinions per person (13)

$\rho_{PF} = \frac{f_{PD}}{N_o}$ (14)

Calculation of the PD density of opinions ab per person (ρ_{PD}) in everyday life

$\rho_{PF} = \frac{531}{200} = 2{,}65\ opinions\ per\ person$ (15)

$\rho_{PR} = \frac{f_{PR}}{N_o}$ (16)

Calculation of the PR density of opinions ab per person in everyday life

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$\rho_{PR} = \frac{446}{200} = 2{,}23\ opinions\ per\ person$ (17)

$C_{SF} = \frac{f_{SF}}{f_{rSF}}$ (18)

Complexity/variability of SF opinions per person (C_{SF}) in everyday life

$C_{SF} = \frac{543}{480} = 1.13$ (19)

$C_{PD} = \frac{f_{PD}}{f_{rPD}}$ (20)

Complexity/variability of opinions per person (C_{PD}) in everyday life

$C_{PD} = \frac{531}{437} = 1.21$ (21)

$C_{PR} = \frac{f_{PR}}{f_{rPR}}$ (22)

Complexity/variability of opinions per person (C_{PR}) in everyday life

$C_{PR} = \frac{446}{395} = 1.13$ (23)

In the second level of calculation, we determine the real factors of SF, PF, and PR by finding the theoretical maximum density and complexity/variability of factors. Let's assume that the maximum density is 10 opinions per person and that the maximum diversity is equal to one. The higher the quotient between all opinions and diverse opinions, the smaller the complexity/variability of opinions. The maximum value of complexity/variability is one, which means that out of 1000 opinions, we have 1000 different ones. To obtain real factors for both positive and negative factors, as well as proposals, we compare the actual density and diversity with the theoretical values.

$$F_{SF} = \frac{C_{SF}\rho_{SF}}{C_t\rho_t} = \frac{1.13\ .\ 2.71}{10} = 0.31\ (24)$$

$$F_{PF} = \frac{C_{PF}\rho_{PF}}{C_t\rho_t} = \frac{1.21\ .\ 2.65}{10} = 0.32\ (25)$$

$$F_{PR} = \frac{C_{PR}\rho_{PR}}{C_t\rho_t} = \frac{1.13\ .\ 2.23}{10} = 0.25\ (26)$$

On the third level of calculation, we can use the following mathematic formula to directly calculate the strength of stressors and obtain the result in stress degrees (°S).

$$\sigma_{SF} = \arcsin\sqrt{\frac{F_{SF}F_{PR}}{F_{PF}}} = \arcsin\sqrt{\frac{0.31\ .\ 0.25}{0.32}} = 32.76\ °S\ (27)$$

Based on the opinions of civil servants and researchers, the stress power for everyday life is 32.76°S, which can be evaluated as a medium strong level. If the stress power exceeds 50°S or 60°S (resulting in higher or even high stress levels), it could be assumed that our society has catastrophic problems. This is because the respondents were predominantly highly educated people with at least a university degree (many even had a master's degree and/or doctorate), with permanent employment, regular income, and a stable family situation. Therefore, compared to the workforce in manufacturing, hospitals, etc., they are relatively well-off. The predicted outcome indicates that there are more serious problems in everyday life, especially of a professional nature (especially social and performance negative stressors are relatively strong), because the home environment causes much less negative stress. It is also useful to calculate the stress power within individual categories of factors. Only one example of stress calculation for attentive physical factors (AtSF, AtPF) and proposals (AtPR) will be presented. Other calculations for other factors follow the same principle.

$\rho_{AtSF} = \frac{f_{AtSF}}{N_o} = \frac{17}{200} = 0.09$ (28)

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$\rho_{AtPF} = \frac{f_{AtPF}}{N_o} = \frac{25}{200} =$ 0.13 (29)

$\rho_{AtPR} = \frac{f_{AtPR}}{N_o} = \frac{9}{200} =$ 0.05 (30)

$C_{EATSF} = \frac{f_{oATSF} - f_{EATSF}}{f_{rATSF} - f_{rEATSF}} = \frac{526}{467} = 1.13$ (31)

$C_{EATPF} = \frac{f_{oATPF} - f_{EATPF}}{f_{rATPF} - f_{rEATPF}} = \frac{506}{419} = 1.21$ (32)

$C_{EATPR} = \frac{f_{oATPR} - f_{EATPR}}{f_{rATPR} - f_{rEATPR}} = \frac{437}{386} = 1.13$ (33)

$F_{AtSF} = \frac{C_{AtSF}\rho_{AtSF}}{C_t\rho_t} = \frac{1.13 .0.09}{10} = 0.01$ (34)

$F_{AtPF} = \frac{C_{AtPF}\rho_{AtPF}}{C_t\rho_t} = \frac{1.21 .0.13}{10} = 0.02$ (35)

$F_{AtPR} = \frac{C_{AtPR}\rho_{AtPR}}{C_t\rho_t} = \frac{1.13 .0.05}{10} = 0.006$ (36)

$\sigma_{AtSF} = \arcsin\sqrt{\frac{F_{AtSF}F_{AtPR}}{F_{AtPF}}} = \arcsin\sqrt{\frac{F_{AtSF}F_{AtPR}}{F_{AtPF}}} =$ 3.49 °S (37)

Before presenting the calculation for estimating energy consumption and efficiency, it is useful to provide some basic information about the need for energy and energy sources. Humans require energy to maintain a relatively constant body temperature, perform bodily functions (such as movement, digestion, and organ function), grow (especially during childhood and adolescence), regenerate (such as skin, hair, and nails), and maintain metabolism (such as breathing). Humans primarily obtain energy through food and drink (such as carbohydrates, fats, and water) and sunlight (such as vitamin D). Energy demand can be divided into two categories:

a. Basic: this is about 24 Kcal per day in a supine position to maintain body temperature.
b. Activities: such as lying down, sitting, physical and intellectual work, and sports.

There are differences between the sexes in terms of energy needs and consumption because, due to women's generally weaker body structure (such as body height, weight, and muscle mass), their energy needs and consumption are slightly lower. Therefore, proportional average values will be used to estimate energy consumption and efficiency. These values are defined as follows:

a. At rest: energy consumption is about 1832 Kcal.
b. In a sitting position: energy consumption is about 2213 Kcal.
c. For heavy physical activity: energy consumption is around 3800 Kcal.

For the purpose of simplification in estimating energy consumption and efficiency, a value of 2500 Kcal will be used for both energy consumption and supply. This means that the input and output of the system are both 2500 Kcal. From this perspective, humans can be viewed as a system that produces and consumes energy due to two key processes: nutrient processing and activity, including negative stressors.

$W_{EU} = W_I - \left(\frac{W_{LS}\sigma_m}{\sigma_W}\right) = 2500\ Kcal - \left(\frac{2500\ Kcal\ 32.76\ °S}{90\ °S}\right) = 1590\ Kcal$ (38)

W_{EU}… energy consumption in Kcal
W_I… Input or supply energy in Kcal
W_{LS}… Energy consumption due to stress inclination in Kcal
σ_m… Measured or calculated stress power in stress degrees
σ_W… Maximum stress strength in stress degrees determined as 90 °S

The calculation resulted in 1,590 Kcal of effectively consumed energy per one public servant based on stress inclination or stress power. If we calculate the effective daily energy consumption for 200 civil servants based on stress power, the result would be 318,000 Kcal, which roughly corresponds to heating 8,000 liters of water by 39.85°C (conditional

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comparison). If the stress power were 0°S, the effective daily energy consumption would be a respectable 500,000 Kcal, which could heat almost 12,500 liters of water by 39.5°C. These values do not yet tell us what percentage of effective daily energy is used efficiently in human activity due to lower stress levels. To determine this, we will present the efficiency calculation.

$$ή = \frac{W_{EU}}{W_I} 100\ \% = \frac{1590\ Kcal}{2500\ Kcal} 100\ \% = 63.60\ \% \quad (39)$$

The effective daily energy efficiency (ή) was only 63.60%, which means that in this case, the civil servant lost 36.4% of energy per day due to distress.

Factors	**Everyday life σ_v (°S)**
Attentive	3.49
individual psychological	12.82
Parcial social	12.82
Social	18.26
Performance	14.21
Health biological	6.38
Entire stress power	32.76
Energy efficiency	63.6

Table 5. The individual and collective stress power values and energy efficiency of public servants in everyday life

Table 5 shows the stress power for individual factors in the research on stress in public servants' everyday lives, as well as the energy efficiency (ηW) that is calculated.

Area of stress power in stress degrees	**Evaluated power level of stressors**
00.00 ^{0} S - 15.04 ^{0} S	Very low
15.05 ^{0} S - 30.04 ^{0} S	Low
30.05 ^{0} S - 45.04 ^{0} S	Medium
45.05 ^{0} S - 60.04 ^{0} S	Higher
60.05 ^{0} S - 75.04 ^{0} S	High
75.05 ^{0} S – 90.00^0 S	Very high

Table 6. A negative stress power rating scale in stress degrees (°S)

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Table 6 shows a scale for ranking the strength of negative stressors in terms of stress level. In the study on distress in the ordinary lives of civil servants within the public sector, the stress power can be classified as medium (as 32.76°S is located within the rating scale from 30.05°S to 45.04°S). As a result, the daily energy consumption per civil servant attributed to negative stress factors was 36.4%, which also falls within the moderate range. These results confirm the second research hypothesis.

Based on the feedback received from civil servants and researchers, the results indicate a significant impact of stress resulting from social, performance, partial social, and individual psychological factors. However, the influence of health-biological factors, and physical factors appears to be less prominent. The study of stress power in everyday life, as perceived by public servants (32.76°S), exhibits a moderate level of complexity and social stratification. Within societies, different segments of the population experience diverse conditions and possess varying levels of resources. They may lead orderly or disorderly lives, have optimistic or pessimistic outlooks for the future, among other differences.

However, a different perspective emerges when we delve into the substantial responses that primarily pertain to their work environments.

It is crucial to address the issue of energy loss and improve energy efficiency. The calculated values revealed that, on average, public servants were unnecessarily losing 36.4% of their energy per day. In summary, creating a more harmonious social and work environment is significantly more achievable in the public sector, research institutes, and libraries compared to industries involved in fabric production, glassmaking, chemicals, metals, and similar sectors. By fostering such an environment, we can have greater confidence in the motivation and enhanced work and intellectual performance of our civil servants and researchers. It is vital to acknowledge that the absence of this foundation would compromise the stability (proper functioning, credibility, counseling/education of individuals, knowledge transfer, etc.) and future prospects (e.g., patents, innovations, inventions) of the social system.

Discussions

The research aimed to identify both distressing and positive factors, as well as recommendations for improving everyday life, as expressed by representatives of the public sector. These factors were subsequently utilized to calculate stress power and energy efficiency.

This study makes significant contributions to the fields of organizational psychology/sociology, organizational behavior, and workplace stress. It aligns with the principles of positive organizational psychology, which emphasize the importance of considering both negative and positive factors when understanding and addressing workplace stress (Hart & Sasso, 2011; Wong, 2011). To effectively manage and mitigate stressors, particularly in large organizations, it is necessary to comprehensively study stress. This allows us to gain a better understanding of the relationships between various factors and anticipate potential sources of stress. This knowledge has the potential to enhance the quality of life, improve work/business performance, and enhance overall health for a significant number of individuals. Moreover, it is relevant to both positive and negative organizational behavior, as numerous organizational processes, interpersonal relationships, and subjective perceptions can influence outcomes positively or negatively (Caza, 2015).

By measuring constructive suggestions from human resources regarding stress reduction, we can evaluate the strengths of our workforce and generate innovative solutions to problems. Active involvement of human capital in addressing workplace stress is crucial for effecting positive changes and adapting to rapidly changing conditions (Ferdman, 2013). It is important to recognize that workplace stress results from a complex interplay among organizational processes, interpersonal relationships, and subjective perceptions. Furthermore,

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promoting well-being within organizations extends beyond the perspectives of a small group of individuals.

Calculating stress power within individual social environments, specifically work environments, can offer valuable insights into the prevalence and intensity of various stressors. It can also provide an understanding of how people from different social backgrounds perceive, comprehend, and emotionally respond within established social hierarchies. Rigid and bureaucratic hierarchical systems often contribute to heightened stress levels, impeding social progress and stifling the potential growth of individuals. As stress hotspots increase in magnitude and intensity, energy consumption also rises. This manifests in terms of expended kilocalories on unproductive or monotonous tasks, wasted time and financial resources, and diminished positive bioenergy, both within organized communities and in personal lives.

This data and information can be utilized to identify systemic problems within various work systems. Top management can leverage this knowledge to make informed decisions and implement necessary corrective measures. Additionally, we can ascertain the impact of different types of stressors on one another. By examining a comprehensive range of factors, including individual factors, we can identify areas with high or low levels of stress in different social/work environments. When the overall stress power surpasses the average stress power, it serves as a warning sign for management to make prudent decisions and take appropriate action.

In any case, the same holds true for individual types of stress power, such as performance, individual psychological, social, and health-biological factors. However, this doesn't imply that management should simply wait for stress power to exceed a certain threshold. It is advisable to respond in real-time, especially when specific stress factors, like performance and social stress, are particularly disruptive and result in a waste of valuable time and energy. Therefore, it is also recommended to calculate energy efficiency not only for overall stress power but also for individual types of critical stress factors. The calculated data on stress power and energy efficiency were based on the opinions of participants in different work environments, which introduces a degree of subjectivity. To minimize subjectivity, it is recommended to have a sufficiently large sample size (at least 200 respondents).

Measurements of stress power and assessments of energy efficiency serve as a psychosocial barometer for the situation in society, particularly within work organizations. They serve as reminders to make sensible decisions and implement corrective measures. This knowledge is acquired through the process of observing and conducting empirical research, providing an overview and proportional control over critical factors.

One major limitation of this research is the intellectual categorization of the opinions of public servants. In this context, improvements in the form of automated classification of factors and suggestions for reducing negative stress with the assistance of artificial intelligence and suitable language models are desirable. Therefore, researching stress levels and energy efficiency in various work organizations should be systematically mandated, similar to measuring CO2 emissions in the atmosphere

Future research could entail measuring stress levels and energy efficiency in other workplace settings, including healthcare, law enforcement, industry, and the military. This would offer a comprehensive understanding of stress hotspots within a specific country and energy wastage across various social zones (e.g., migration zone, cultural zone, industrial zone, trade zone, government zone). These findings may be more or less closely associated with the incidence of crime (e.g., economic crime), as well as positive or negative government and managerial decisions.

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Conclusions

The research presented on the stress power and energy consumption of civil servants in everyday life offers the potential for a more comprehensive understanding of stress and positive factors. Adapted versions of the same survey could be utilized to investigate not only civil servants but also various work organizations (e.g., healthcare, police, army, education), occupational roles (such as nurses, musicians, actors, politicians, scientists), families of patients, different lifestyles, ethnic minority groups, diverse social strata, managers, political leaders, industries, healthcare providers, law enforcement agencies, military personnel, sports teams, and road traffic, among others. For greater clarity, some examples should be provided.

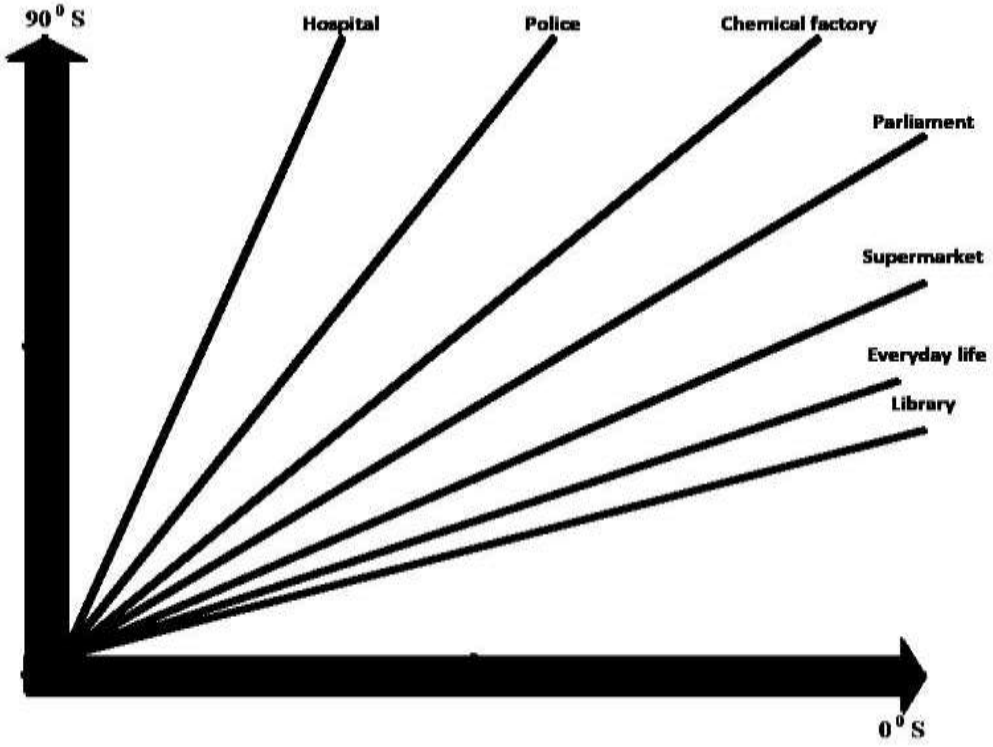

Figure 1. The intensity of distress factors within various organized societies

Figure 1 demonstrates the power of distress factors in various organized associations. This model could effectively illustrate (though it is a fictional representation, with exceptions for the library and public sector - everyday life) in which organizations there are the highest levels of distress and eustress factors (e.g., within peace institutes, there is the least distress, while hospitals have the most). This approach would result in identifying the main stress focal points in society. Moreover, it would allow for gradually finding solutions that could be integrated into various work systems.

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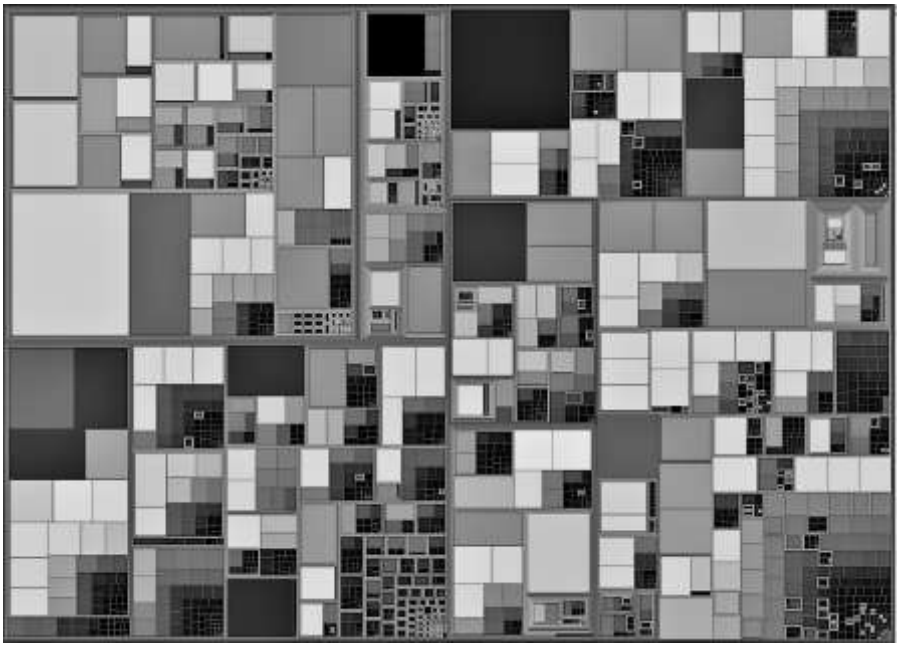

Figure 2. The intensity of distress factors in street settlements

Figure 2 illustrates the intensity of negative stress factors within street communities through data mapping visualization. Such visualizations are highly useful for demonstrating the proximity between stress hotspots and potential connections to domestic violence and criminality.

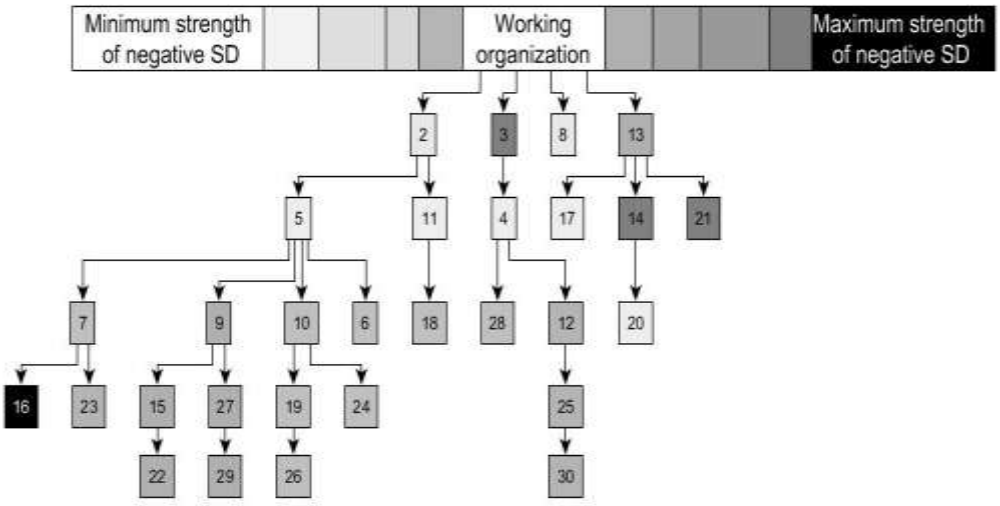

Figure 3. The intensity of distress factors within a particular work organization

Figure 3 illustrates the spectrum of distress factors within a fictional organized association. This type of visualization effectively highlights both the lowest and highest levels of negative stress factors within various departments and even sub-departments. It prompts the question: Why is the level of negative stress factors lower in some departments, while others exhibit higher or even very high distress levels? This approach facilitates the identification of underlying causes and enables the prediction of potential outcomes or consequences that may arise from a given organizational structure. Additionally, it provides the opportunity to establish

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conditions that could yield positive results in the ongoing work process. Typically, some departments are more interconnected due to their work programs, while others operate more independently, which leads to suboptimal communication channels. Using the spectral organizational chart visualization technique, it is possible to assess the proper distribution of staff across departments and sub-departments. Furthermore, this technique allows for the comparison of employees' educational levels, expertise, and expectations. It can also be concluded that certain leadership styles within departments are less effective, as they contribute to significant sources of stress, such as insurmountable conflicts, unhealthy competition, and other related issues.

In essence, this research contributes to theories in organizational psychology and sociology by examining not only stressors but also positive factors and proposing constructive strategies for reducing stress power (Dewe & Cooper, 2021).

Knowledge of critical factors is acquired through the process of observing and conducting empirical research, which provides a comprehensive overview and proportional control over them. Understanding the causal and conditional connections between different types of factors is particularly important. This is because certain negative social stress factors can arise from complex interactions among individual psychological, social, performance, and health-biological factors. Furthermore, social stress factors have the potential to give rise to other stress factors. We can liken this to solving a puzzle, where we piece together information from measurements of stress levels and assessments of energy consumption in various social environments, specifically in work organizations. While this approach aids in achieving a more optimal understanding of individuals and social environments, its effectiveness remains boundless as long as our systems remain dynamic.

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