PROFILING SCHEME FOR "POTENTIAL STRESS"

Steen Bjerre¹, Anka Tsvetanova², Siya Veleva³

Abstract: It is a daily task for management to design jobs, pay systems, job descriptions and other aspects of organizational functioning. But by including a profiling of employee's potential workplace stress, companies could improve "the daily health" of employees and support a healthy and motivated organization underpinning a satisfactory company performance.

Drawing an employee's stress profile would enable the manager to address the workplace stress prior to it actually happens, which would be beneficial for both the employee and the company.

The aim of the paper is to suggest a profiling scheme for "potential stress" based on 12 so-called "stress boosters". The profiling should be viewed upon as an operational tool, which managers can use in their daily

management of both employees facing a potential risk of becoming stressed, but also to support the process of hiring new employees.

Key words: stress, stressor, engagement, workplace, profile.

JEL: D23, M12, M14, M54.

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Introduction

Engaged, motivated and healthy employees contribute and support best the success of any company. However, the Gallup Institute reported a

¹ International School of Management, Germany, e-mail: steen.bjerre@gmail.com, ORCID: 0009-0006-6460-0939

² Technical University of Sofia, Department Economics, Industrial Engineering and Management, e-mail: a.cwetanova@tu-sofia.bg, ORCID: 0009-0002-5577-7565

³ University of Architecture, Civil Engineering and Geodesy, Department Sustainable land use and real estate management, e-mail: s.veleva_fgs@uacg.bg, ORCID: 0000-0003-3454-1174

global stress level of 35% in 2019 (Inc, 2022) and the figure has raised to 44% in 2022.

Lengthy periods with stress courses not only have serious impact on the employees' mental and also physical health, but also, due to a lower motivation and engagement in the work, employees contribute negatively to the business performance.

A 2020 study concludes that "...chronic stress leads to poor self-regulation of resources needed for work engagement maintenance. Therefore, employees with higher stress levels undergo lower energy levels and are less enthusiastic about work related tasks. In consequence, work performance is compromised" (Miranda, 2020). That is, together with employees' psychological and physical state of health, including stress, also the individuals' engagement in the work is consistently associated with work performance.

23% of the employees claim to be engaged in their jobs, and 51% says that they are actively seeking new job (Inc, 2023a). Such figures indicate a serious challenge to companies.

Committed and involved employees are less likely to look for new jobs. They are more loyal, more productive, work harder and support the development of a better climate within the company. The opposite is the case for stressed employees. They are less productive, have higher rates of absenteeism, are less motivated and may also be less loyal and therefore contribute to an unwanted company culture.

Many publications and studies report on reasons for, and levels of stress, including demographic profiles for stressed persons, and also suggestions for dealing with stress. But who has "potential" to become stressed?

For any company it would be useful to have a profile of employees who potentially get stressed, enabling the employer to instigate measures to minimize, or to prevent stress.

This paper will identify a set of components, which may be used to draw such a profile.

1. Research methodology

For the purpose of this paper many publications and studies are analyzed concerning reasons for, and levels of stress, including demographic profiles for stressed persons, and also suggestions for dealing with stress. Research methodology is implemented through a comparative analysis of the specialized literary sources, 12 so-called "stress boosters" are determined. Profiling scheme for "potential stress" was developed on their basis.

2. Results and discussion

2.1. "Quiet quitter" and disengagement

When Gallup reported the percentage of globally engaged employees for the first time, the figure was 12%. Their latest report from 2022 states that the figure has increased to 23%.

In Europe, however, it is only 13% of the employees, who are engaged, which is the lowest regional percentage in the whole world.

A study has concluded that work stressors (role conflicts, stressful events, workload, work pressure...) ..." demonstrate relatively strong correlation with emotional exhaustion, a dimension of job burnout" (Ganster & Rosen, 2013). That is, together with an increase stress level in the workplaces, it is logical to anticipate a lower engagement in the job, which the relatively low figures show.

Also, when it comes to "quiet quitters", Europe stands out with 72% compared to the Global figure of 59% (Inc, 2023a).

What is understood by a "quiet quitter" is an employee who fulfils her/his primary job responsibilities, but no more/ no less. That is, the employee is less willing to take upon activities, which are not explicitly described within the formal job description.

The quiet quitter contributes with a bare minimum of what is required, and nothing more.

Companies need to be aware of this type of employees. Quiet quitting may lead to lower productivity, organizational conflicts due to unequal workloads between the employees, lower motivation, lower commitment and also less engagement in the job.

Disengagement may not immediately be seen as a dramatic challenge since the employee is doing his/her job but is merely refusing to take upon additional tasks. However, a workforce which is prepared, and motivated to go an extra mile beyond what is defined provides a competitive advantage for any company. Since it is only few jobs that can be described fully in a job-contract, companies should therefore be relying on employees

who are prepared to demonstrate organizational citizenship behaviour, or in other words, voluntary stepping up to meet demands beyond the job description.

It is a prerequisite for such behaviour that the company culture, including managerial conduct, supports an organizational environment of trust, wellbeing, motivation and career prosperities. Only then the company can expect extraordinary contribution from the employees.

If the employer is demanding additional work and efforts, without offering sufficient in return, the outcome may be demotivated, unengaged and stress the employees.

From the Gallup study, "State of the Global Workplace: 2023 Report" (Inc, 2023a), it appears that the global figure for quitters is 61%. And if the figure for "actively disengaged" is included, the total for employees not engaged in their work reaches close to 80%.

This figure indicates that a high number of employees aren't satisfied or motivated by their workplace.

When the respondents were asked which changes they believed would make their workplace better, they listed a number of factors related to the workplace culture, payments and benefits, and the general wellbeing.

These factors were underpinned by a number of specific stressors including (Inc, 2023a):

- Managers should be more approachable.
- There should be more autonomy in the work (a Canadian study repeats this point and notes that "...workers who do not have control over their work are exposed to stress"), (Dewa et al., 2011). Another study states that "...there is evidence that work interventions have an influence on work-related well-being..." (Ganster & Rosen, 2013), which implies support to the above.
 - Clearer goal settings
 - The company/managers should show employees more respect.
 - Employees should be granted rewards for the results.
 - Better communication
 - Less overtime
 - More breaks

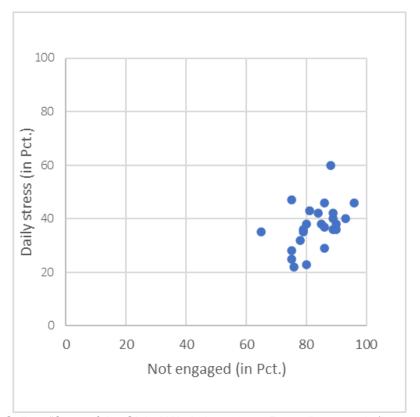
From these findings one may reason the other way around and conclude that the notable list of stressors is hampering the employees' perception of satisfactory workplace.

That is, the different stressors lead to stress which results in an unengaged attitude to the work.

Gallup's 2022 report states that close to 3 out of 4 European employees are quiet quitters. If the figure for "actively disengaged" is included, close to 9 out of 10 European workers are not engaged in their job. This implies a somewhat low motivation and engagement for the European workers! Following the above conclusion and assuming that European workers' perceptions are in line with the global perception, one may conclude that European workers are also exposed to the different stressors resulting in stress and a rather low engagement in the daily work.

From the findings in the above mentioned Gallup study (Inc, 2023a) figure 1 illustrates the relationship between the percentage of daily stress and "not-employee engagement" in 20 European countries. The countries included are Romania, Bulgaria, Sweden, Hungary, Denmark, Norway, Portugal, Germany, the Czech Republic, Finland, the Netherlands, Poland, Greece, Ireland, Belgium, Austria, the UK, Spain, France, Italy, Estonia, Albania, Lithuania, Latvia (Inc, 2023a).

Without focusing on the individual countries, Figure 1 presents a somewhat uniform situation for the European countries: some 85% of the European workers are not engaged in their work, and the daily stress level is around 40%.



Source: Gallup, "State of the Global Workplace: 2023 Report" pp.73-74, (Inc, 2023a)

Figure 1. EU countries not-engaged/daily stress ratio

The stress level for the different European countries differs to some extent, but for the purpose of this paper the variations are not seen as so big that the later findings cannot be applied as an expression of common European situations.

From Figure 1 it is seen that the Greek figure for stress is somewhat higher (60%), and in the case of Romania, the figure for being "not engaged" is lower than the European average (65%). Nonetheless, if we assume that the correlation from Figure 1 exists, it can be concluded that non-engaged employees have experienced impact from various and different stressors, which has led not only to being stressed but also to the state of being "not-engaged".

On the other hand, if it works the other way around too, that is, whether the non-engagement situation leads to stress, perhaps resulting from low or no motivation, this can be taken as an implication drawn from the figures indicated below.

However, in a 2009 survey of 11,000 employees across Europe, around 40% of Germans, 33% of Belgians and 39% of Swedes said that they didn't have enough work to fill their day. Also, 24% of the employees admitted to occasionally falling asleep during work hours.

Therefore, stress might be a result of external circumstances or pressure from the workplace. But stress can also be the result of profound boredom, lack of challenges and total senseless activities (Noermark et al., 2018).

Thus, non-engaged employees may not be stressed, but clearly have the potential for becoming stressed.

2.2. Resources versus demands

Stress manifests itself in different forms and is triggered by different reasons, different stressors. And stress comes in all kinds of job categories and industries. Stress strikes individually and is also experienced individually.

A general and widely accepted definition is that workplace stress is a result of a discrepancy between an individual's skill sets or available resources, and, on the other hand, the challenges or work demands. Resources include both external factors such as physical and emotional support from the others, financial resources and other physical resources, as well as internal resources such as education, knowledge and experience.

Given the difference in individuals' accessibility to these resources, people will experience the same situation differently. Also differences in personalities make some people resilient to a certain stressor while others will feel threatened and have difficulties to handle the same stressor.

Another definition adds that stress occurs when personal needs and expectations cannot be met due to a mismatch between demand and resources (Dewa et al., 2011). That is, stress may also occur as a result of unfulfilled career expectations, inadequate job challenges, or unsatisfactory remuneration. Later in this paper, the relationship between job satisfaction and mental health will be described.

The Danish Deputy Prime Minister recently went on a 6-month sick leave due to stress. New Zealand's Prime Minister has resigned due to stress. In our fast-paced societies people are stressed in all kinds of occupations and all kinds of industries, but the main source of stress is work, no matter what type of industry or which occupational function is observed

2.3. Stressful workplaces

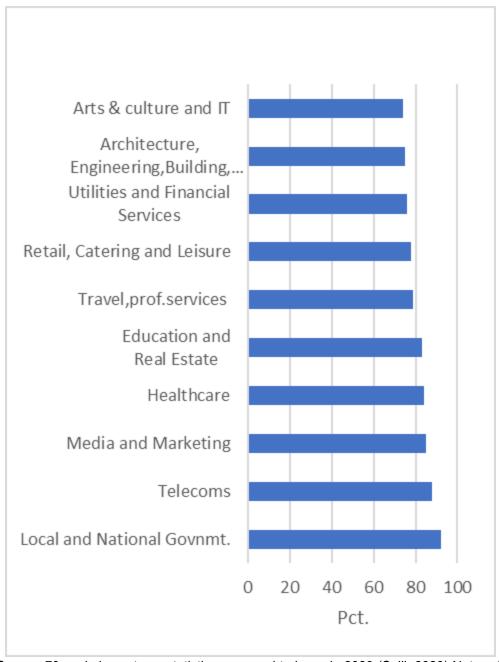
Workplace is the most common cause of stress. But as can be seen in Figure 2, there seems to be only a slight difference in perceived stress across industries. The figures are from the UK, but are assumed not to differ significantly from other European countries (see comments to Figure 1).

With the exception of local and national governments, the experienced stress levels for the different industries do not deviate noticeably around an average of 80%.

A number of selected and stressful industries are listed from various industry-specific studies in the UK (Burton, 2023).

The list is based on specific job categories within individual industries and therefore cannot be taken as a general observation for all job groups in the said industry, but simply as highlighting the selected type of jobs.

- Healthcare: 80% of doctors report feeling stressed
- Education: 80% of UK teachers reported being stressed
- Hospitality: 80% of chefs report poor mental health
- Legal: 90% of solicitors report feeling stressed
- Media: 80% of journalists report being stressed



Source: 70 workplace stress statistics you need to know in 2023 (Spill, 2023) Note: when more industries are included in one group, the percentage is identical to all mentioned industries

Figure 2. UK industries experience workplace stress

For all of the above, the workload was identified as a contributing factor or stressor. According to the Danish Research Institute (Nationale Forskningsinstitut for Arbejdsmiljø) workload is repeated as the main stress factor. Other key factors include fast-paced work, changing working hours, low impact on one's own work, and jobs involving other people.

The researcher is quoted for saying, "Where there are people, there is the possibility of conflict, and this causes stress. Therefore, care staff, teachers and pedagogues often feel stressed" (Apropos Kommunikation, 2023).

But other job categories are also having frequent contact to other people. Some with focus on company-internal contacts, others with external contacts, and all with different frequency.

According to the North American career site, CareerCast.com, the most stressful jobs are: 1. enlisted military personnel, 2. firefighter, 3. airline and 4. Pilots (Career Cast, 2023). Also, within these job categories individuals will experience workplace stress differently. However, by combining these jobs with the above UK-findings it appears that those who are working with health care and public safety are experiencing rather high levels of stress.

Physically and psychologically demanding occupations are believed to be more emotionally demanding, and more stressful. "Professions where communicating with and helping others are key components of work are thought to be the most emotionally demanding as a result of the psychological strain that carries onto non-working time, affects sleep and reduces recovery from work stress" (Dedele et al., 2019).

A study from Alberta, Canada also observed the stress consequence from interaction with other people. Workers viewed the probability of classifying a job as highly stressful if their actions were perceived to affect co-workers, the environment and their company (Dewa et al., 2011).

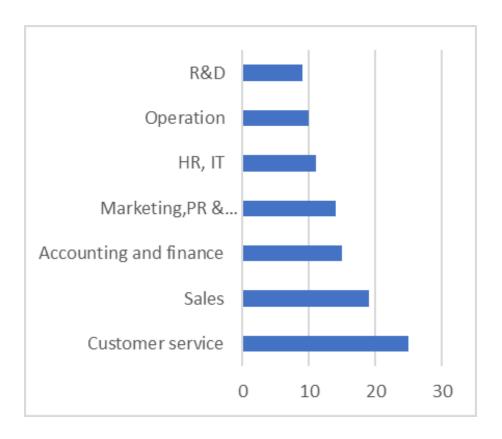
Examples of such jobs could be:

Having an effect on co-workers: Military personnel, doctors, builders; Having an effect on the environment: firefighters, police, journalists;

Having an effect on their company: sales, customer service, managers.

Looking at stress per individual departments within companies, a UK study confirms that the departments interacting with other people are more stressed than others (see Figure 3).

The sales department and customer service are not only the departments with the most both personal and virtual/telephone contacts in a company. Due to their functions, they will have daily, operational contact to more or less all the departments in the company. But they have not only company-internal contacts. They are also the departments with most external contacts like customer visits, contract discussions, service calls, call-centres etc., and customers can apparently be quite stressful!



Source: The 2020 UK workplace stress survey (Perkbox, 2023)

Figure 3. Departments most likely to experience daily workplace stress (in pct)

At the other end of the scale, production and R&D employees, of course, also interact and work with others. But contacts during working hour will generally be limited to internal, well-known colleagues. These functions will not have much need to contact and interact with other departments. In addition, external contacts will be limited.

Besides departmental affiliation, the size of the company also has an impact on the experience of stress More than 80% of employees in large organizations in the UK experience stress at work, while the rate is 10% lower n companies with 1-9 employees (Spill, 2023).

Managers are particularly stressed at work. According to a recent publication (2022) by Microsoft (Microsoft, 2023) 53% of managers report experiencing job burnout, which is slightly higher than employees in general. This high figure may not be surprising. Managers had to guide their employees through the pandemic and beyond, and the job required a lot of

empathy and extra work - without additional resources, during a period of uncertainty.

According to a 2021 Gallup publication, managers are generally reported to be more stressed than their subordinate employees, "...Managers report more stress and burnout and poorer physical wellbeing and work-life balance than the people they manage" (Inc, 2023b).

From the above, it can be concluded that employees who work with others, especially outsiders, are particularly exposed to workplace stress. And for commercial companies, it is even more obvious when the employee perceives or knows that his/her function and actions affect the results of the company.

This observation can be extended by saying that the more an employee believes and can identify his or her direct impact of their performance on the results of the company, the more engaged the employee will be and, therefore, the more they will view work as career - a position, not just a "job".

In this case, the various factors will potentially put pressure on the employee and lead to stress, which was also mentioned by the previous Canadian study confirming that "viewing work as a" job" versus a "career" was associated with lower stress" (Dewa et al., 2011).

From the above, it can be concluded that employees who meet one or more of the characteristics of being ambitious, career-oriented, having a lot of external contacts and having jobs with explicit or perceived effect on the company's results are particularly exposed to workplace stress.

2.4. Sex, age and stress

Both Gallup (Inc, 2023a) and a Lithuanian Study (Dedele et al., 2019) concluded that the perceived stress levels for men and women were more or less identical (some 40%).

Equal stress levels for men and women were confirmed by a 2016 Danish study (Sorensen et al., 2022). However, for 2021 a slightly higher score was reported for women, 34% versus 25% for men (Danish Health Authority, 2021). But in general, the stress figures for the two sexes are very close, so for the purposes of this paper, these figures do not lead to consideration of differences in potential stress for the different sexes.

As for age, there are different figures. Gallup reported in its 2023 report that globally 41% of people under the age of 40 experienced daily stress. For people over the age of 40 the figure is 43% (Inc, 2023a).

For Europe the figures are 40% (under 40) and 38% for people over 40 (lnc, 2023a).

A Canadian study reported that the stress level for the different age groups was between 13% and 20% (Dewa, Thompson, Jacobs, 2011). That is, there are no major differences in terms of stress between age groups.

A German stress survey covering the entire German population, i.e. not just workplace stress, reported a stress level of 66% to 82% for people in the various age groups - 19-59 years. That is, there are no big differences in the perception of stress within the different age groups. For people over the age of 60 the stress rate was less than 40% (Baas, 2016).

A 2016 Danish study concluded that "...young workers under the age of 35 generally report the highest level of stress. For both men and women, the score is lower the older you are" (Sorensen et al., 2022).

These findings support the general assumption that stress doesn't differ with age.

However, another set of figures from a 2021 report highlights that young people in particular are experiencing stress. In the 18-24 age group 91% feel stressed, and in the 25-34 age group the figure is 87% (Cigna, 2023).

From these observations and for the purposes of this paper, in general sex and age do not appear to play an important role as a potential cause of stress. The only exception to consider is that people under 35 years may have a higher risk of getting stressed.

2.5. Insecurity and stress

Shame can cause stress. A person's insecurity can lead to one of the two types of shame, (a) performance shame resulting from the person's doubts about self-worth and competence, or (b) relational shame where the person doubts the respect and acceptance by colleagues of the person and his/her contribution to the workplace.

Both types of shame can lead to stress (Schou, 2023). So, if a person does not meet his or her own expectations, or if colleagues are not perceived as accepting of his or her performance, the person may become stressed. This means that low self-esteem or personal self-esteem can lead to high personal insecurity, which might be a potential cause of stress.

2.6. Job satisfaction and stress

Both an individual's job satisfaction and general health affect the level of perceived stress in the workplace.

There are different ways to measure job satisfaction. One assumption is that it is important whether a person finds the work interesting, whether the person has a good relationship with her/his colleagues and managers, has a satisfactory salary, and has sufficient independence at work, etc. Other understandings of job satisfaction have been proposed, but no matter which, it has previously been concluded that there is a strong relationship between job satisfaction and a person's mental and physical health (Faragher et al., 2013).

Although many companies conduct regular internal surveys to monitor the "climate" including job satisfaction among their employees, the results are, for confidential reasons, impossible, or even not intended to be traced back to the individual employee. But the management can get an assessment of the current organizational environment and level of employee satisfaction, and thus initiate taking measures to deal with or to avoid potential overall stress in the organisation.

That is, such surveys may serve the purpose of promoting measures of overall job satisfaction in an organisation, but will be difficult to use for individual employee initiatives.

An individual employee may be stressed due to job dissatisfaction, but prior to such a state of mind, only a subjective assessment can determine whether a person is potentially at risk of stress.

2.7. Health and stress

In the past, most jobs required at least moderate intensity of physical activity. However, a US study concluded that private sector jobs required 20% less energy than in the 1960's meaning that there was a 20% reduction in daily energy expenditure due to work related physical activity. As a result of lower daily energy expenditure, due to less work-related physical activity, the estimated average weight increased from 77 kg in 1969-02 to 92 kg in 2003-06. Results were similar for women (Church, 2011). In another study, overweight was found to be one of the influential factors in increasing the level of perceived stress (Dedele et al., 2019).

Physical activity is a major factor influencing both physical and mental health and wellbeing. Lack of physical activities can not only lead to overweight but also negatively affect the quality of life.

As a result of the increased use of computers, sedentary or desk work occupies the main part of daily work, especially for white-collar workers, who are likely to spend more than 8 hours per day at a desk (Dedele et al.,

2019). From a 2019 study in Lithuania, one of the conclusions is that when most of the daily work involves desk work, more than 3 hours spent in a sitting position per day can trigger a stress process. In fact, men and women have a 3 and 4 times greater risk of perceived stress when they spend more than 3 hours during daily work compared to those who spend less than 3 hours per day at a desk (Dedele et al., 2019). This finding suggests that desk work is one of the factors associated with perceived stress.

2.8. Elements in the profile

Based on the above finding, it is now possible to establish a list of factors that can potentially lead to a stressful situation at work. This paper identifies 12 operational factors that can be labelled as "stress boosters", see profile diagram below.

However, a person's stress response is not formed solely by these 12 factors.

A list of numerous internal stressors (thoughts and behaviour), external stressors (forces you cannot easily control) and personal filter elements (a person's beliefs, motives etc.) can also contribute. But overviewing and evaluating all these factors for an individual employee would be impossible.

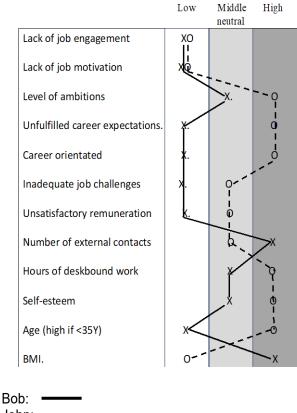
Therefore, the 12 operational factors and the profile diagram below offer any manager an easy and operational tool to deal with the employees' potential workplace stress. This means that, it offers an opportunity to adeal with and possibly prevent stress to an employee. Having identified that an employee has reached an "alert situation" (called "high" in the diagram below) for one or more of the 12 factors, the manager can address the situation before the point at which the employee becomes stressed-out.

Below are drawn "potential stress profiles" for two given individuals, in this example called Bob and John.

Bob is 40 years old. He has been a sales manager in the company for quite some years. He is well liked by his colleagues. Bob is a family man, who vappreciates spending time with his family, including good meals, which has resulted in him being slightly overweight. He is a dedicated employee with consistent, good results and has received good bonus packages over the years. Therefore, he will not be surprised if a career step is not far away.

John is a young (26 years old) newly graduated employee in the finance department. He is single and plans to stay single as he intends to devote all his time to a fast-growing career. He left his previous job after a very short stint because he did not feel they could meet his ambitions.

After Bob and John have been evaluated by their managers, the two "potential stress profiles" look like this:



John: -

Figure 4. Potential-stress profiles

The two profiles clearly demonstrate that Bob and John are perceived as having quite different stress potentials. And also, the number of "stress factors" rated as "high" differs between the two. Assuming that higher total numbers for a "high" evaluation equate higher risk of becoming stressed, it is obvious that John is by far more exposed to stress.

However, profiling should not be used only to obtain a snapshot of a person who is at risk of being stressed. The respective manager gets a clear picture of both specific and challenging factors facing the individual employee, which will enable the manager (together with the employee), to take measures to prevent stress from occurring.

This means that, drawing a "potential-stress profile" offers an operational tool for managers, firstly, to determine individual risk factors and secondly, to focus initiatives to prevent or reduce the likelihood that the person will become stressed.

Profiling can also be used in relation to newly recruited staff. Together with the well-known parameters used during the hiring process, such as competences, previous results, etc., profiling a potential candidate can contribute to a more holistic perception of the candidate, which can lead to a more "secure" decision to hire or not.

Conclusions

This paper clarifies the main factors that underpin the occurrence of workplace stress.

Management designs jobs, pay systems, job descriptions and other aspects of organizational functioning. The inclusion of profiling of employees who are potentially under stress, can play a significant role not only during the hiring process, but also improve "the daily health" of employees, and thus support a healthy and motivated organization underpinning a satisfactory company performance.

The European stress level is fairly even. And since the European business environment, even with some variations, is also quite identical, the findings presented are believed to cover the situation at least for European employees.

The paper proposes profiling "potential stress" based on 12 so-called "stress boosters". Profiling should be seen as an operational tool that managers can use in their day-to-day management both of employees facing a potential risk of becoming stressed, but also to support the process of hiring new employees. In the latter case, profiling, together with traditional tools from a hiring process, will contribute to a more holistic perception of the candidate.

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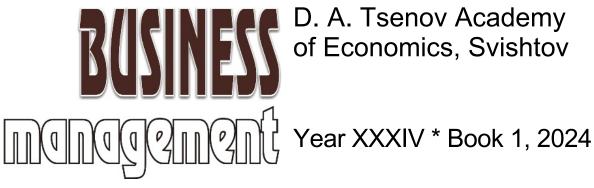
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