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# WORK RELATED PSYCHOSOCIAL FACTORS FOR PERSONNEL FROM CENTRAL ADMINISTRATION OF RESEARCH &DEVELOPMENT AND EDUCATION FIELDS

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Abstract: The paper presents some results of a field study concerning the working conditions, occupational effort and psychosocial factors in personnel activity in R&D and education fields. The study aimed to analyze the general working conditions and the occupational effort factors, including psychosocial factors. The methodology had a multidisciplinary approach, including: analysis of the work content and conditions; assessment of the work effort factors; identification of psychosocial factors; analysis of personnel health state. The results showed the levels of some psychosocial factors in the studied activities, the risk factors that determine work related stress.

**Keywords:** psychosocial factors, ergonomic study, working conditions, risk factors, safety and health at work.

# 1. INTRODUCTION

The increasing complexity of modern workplaces, particularly within the Research and Development (R&D) and Education sectors, needs for an analysis of psychosocial risk factors that negatively impact employee health state, wellbeing and productivity.

The move toward digital methods and artificial intelligence (AI) is changing how various industries work, bringing psychosocial factors that affect workers in both research and development (R&D) education. Because these fields rely more on tech to boost efficiency, it's really important to understand how work affects people's mental and emotional health. New research suggests these shifts could make job-related stress, engagement, and mental health issues worse, especially in places that have always valued teamwork and creative thinking [1, 2]. As digital tools change work habits, professionals face more pressure, potentially leading to more worry and burnout.

These pressures are coupled with a notable rise in mental health concerns, further

complicating the intricate landscape of work-related psychosocial factors [3].

The literature review on work-related psychosocial factors for personnel in central administration, research and development and education fields illustrates a gradual evolution of understanding, particularly in light of AI and digitalization. Early studies in the field primarily focused on the traditional workplace stressors, laying the foundation for newer insights into how technological advancements have reshaped job requirements and interpersonal dynamics within educational and research institutions. predominantly Initial research identified challenges stemming psychological workload and task complexity, as noted in studies examining the basics of work-related stress, which highlighted significant mental health concerns among staff [4]. As digital tools began to permeate these fields, more recent literature reflected on the dual-edged nature of technology; while it can enhance efficiency, it also introduces new forms of stress related to constant connectivity and the demand for upskilling [5].

The integration of AI technologies raised concerns regarding job security and skill relevance, which have become focal points in newer frameworks examining employee well-being [4, 6]. Additionally, investigations have delved into how digitalization impacts workplace dynamics, revealing both beneficial and detrimental effects on psychological health, as shown in longitudinal studies conducted across various R&D and educational settings [7]. This progression emphasizes the necessity for timely interventions and health policies that account for the unique pressures induced by modern technological advancements.

Consequently, the literature points to an urgent need for comprehensive strategies that address the complex interplay of work demands, technological pressures, and mental health for employees in these critical fields.

Hence, the necessity of the study coming from the present occupational safety and health (OSH) law requirements [8, 9] and from the modern digital challenges for R&D and education fields of activity abd central administration for these domains, focused on the necessity of the identification and assessment of occupational risk and demand factors and monitor the personnel' health state and the work conditions. The core aims are to spot and dig into the specific psychosocial risks including those coming from using AI and digital tools for personnel working in central administration, research and development (R&D) and education field. The final aim is to maintain the optimal level of work capacity all along the working life, to identify the possible negative influences of risk factors on employees' health state and work performance.

#### 2. METHODS

The methodological approach was a multidimensional one, taking into account that: the personnel in general, and the personnel working in R&D and education fields in special, is exposed to a cumulus of occupational nocivities generated by the work conditions; the occupational risk factors could derive from the deficiencies of one or more components of the work systems – equipment, work task, work environment and human operator; the employee

react to the action of external factors - also occupational, on all plans - physical and psychological [3].

A mixed quantitative and qualitative research methodologies were used. This dual approach allows a broad analysis of psychosocial stressors, risks, and general employee well-being. The methods included: the work technical - organizational analysis, the psychophysiological analysis, analysis of work conditions, psychosocial factors, demands in the activities at video terminals, ergonomic deficiencies in the organization of the activity and workstations.

Also, for psychosocial factors evaluation was used Romanian Questionnaire for Work Stress Assessment (containing scales regarding: professional demands, type of activity and work tasks; work organization and task content; individual-work interface; health and stress state of employees, in somatic, cognitive and behavioural plan; environment) and Copenhagen Psychosocial Questionnaire (COPSOQ) were used.

The average needed time for the participants to fill the applied questionnaires was 20-30 minutes. No cases when the questionnaires were negatively related to the willingness to participate at the study were recorded.

Based on the data provided by the medical structures that ensure the supervision of the health status of the employees in research and development, respectively education fields, the type of morbidity found in the two professional categories (public officials and contractual staff) within the public institutions and the structure of the pathology found was highlighted. Also, through premises from medical literature and from the specifics of the professional activity and in relation to the professional activity carried out, the conditions for its realization, the risks, demands and stress related to the activity, possible correlations with cardiovascular, respiratory and locomotor system status were highlighted.

Our methodological approach has two core goals: First, to systematically identify and measure psychosocial risks associated with adopting new technologies. And second, to correlate these findings with mental health outcomes in the workplace. This strategy aims to

reveal nuanced relationships between workplace practices and employee well-being during rapid digital transformation.

This section's significance lies in its potential impact on both academic study and real-world applications. In academic terms, it speaks to a key gap in current research connecting AI technologies to psychosocial workplace factors, which may serve to enrich organizational psychology and human resources management. In practical terms, the methodology insights are organizational critical for leaders policymakers looking to support their employees through technological change. Adaptability while maintaining mental health may lead to increased job satisfaction and better performance. Furthermore, a combination of quantitative and qualitative data provides a complete view of how AI affects work-related psychosocial factors, leading to a healthier workplace culture amidst digitalization. Thus, the findings will be a valuable resource for organizations looking to build resilience and support employee well-being as technology evolves.

#### 3. RESULTS

# 3.1 Participants

210 participants were investigated, public employees working in the central administration of R&D and education fields.

Sampling participants from various roles inside these sectors is meant to capture a comprehensive view of what specific psychosocial factors are influencing how employees experience the technology-driven workplace. The expectation is that the findings will inform theories on workplace stressors, job satisfaction, and, indeed, employee health. From a practical angle, the data this research analyzes will offer insights for organizations as they try to implement supportive interventions, and these interventions should account for employees need as they adapt to AI-driven workflows. By pointing out the unique challenges people face at different levels, the research hopes to start a dialogue on best practices and potential strategies for optimizing the work environment as digital transformations

continue. Ultimately, this participant and sampling approach should facilitate a nuanced understanding of the issues at hand, which then sets the stage for actionable recommendations to boost employee well-being amidst the realities of digital and AI integration in work settings.

#### 3.2. Evaluation of work task factors

The scales regarding professional demands recorded answers on a five-points Lickert scale, where 1 represents the lowest level of risk / demand and 5 the highest level.

The difficulty of some tasks and operations, difficulty due both to the high degree of complexity, but also to the consequences involved in carrying them out, appears on the whole at a medium level - 3.44.

The pace of work is in some situations a factor of effort, it being free "quite often" (22.22% of the subjects) or "always" (11.11%) - with a general average level (3.33).

The regime of breaks also represents a low-level effort factor - 2.55, the possibilities of interrupting work being available "as much as needed" (for 33.33% of the subjects), respectively "almost as needed" (33%).

Time requirements, in general, an important demand factor, present an average level - 3.33 (for situations of haste in completing the activity). However, such situations can only lead "sometimes" (44.44% of the subjects) or even "never" (33.33%) to the neglect of some tasks, the level of the corresponding factor being low (2.33).

A factor with a positive impact on the subjective state of the staff (perceived as motivating in the activity, moderating the impact of other effort and/or risk factors and ensuring job satisfaction) is the high degree of use of professional knowledge and skills - "very high" or "quite high" (for 55.55% and 33.33% of the subjects, respectively) – very low level (1.55) as an effort / risk factor.

The possibility of the appearance of new tasks, in relation to which there is not enough professional training or experience, is low (1.88).

The awareness and feeling of the importance of one's own activity (1.22) and the effectiveness of the individual contribution in the whole

activity (1.66), represent other factors with a beneficial effect.

The variety of operations involved in the workload ("very high" or "quite high" - for 88.88% of the subjects) reduces the frequency of monotony situations in the activity.

The types of professional behaviours involved in the performance of the task (based on skills, on rules - regulated work operations or on mental processing and the conscious choice of alternatives) - present elevated or between elevated and very elevated levels (4.44; 4.88 and respectively 4.77). The relatively balanced involvement of these professional conducts in carrying out the work task is perceived as beneficial both for maintaining an adequate mobilization of capacities and for their development over time.

The evaluation of the degree of autonomy in carrying out the tasks indicates a low level as an effort / stress factor - 2.66.

The existence of feedback, the possibility of self-control in relation to the correctness and effectiveness of one's own intervention, "always" (66.66% of the subjects) or "often" (22.22%), overall a very low level as an effort factor - 1.44, represents a factor with a beneficial effect on the staff.

The degree to which professional knowledge and skills are used is between "very high" (55.55% of the subjects) and "fairly high" (33.33%), so a very low level as an effort factor (1.55).

Overload / under-load (due to uneven distribution of workload during different stages of the day / work week) occurs "sometimes" (33.33% of subjects) or "quite often" (33.33%), thus representing an average effort factor - 3.55.

The distribution of work within the work team is, in general, "totally correct" or "quite correct" (55.55% and 44.45% of the subjects, respectively), so it represents a very low level factor - 1.44.

The repetitive character (due to the repetition of partial tasks or phases of activity), of high level (4.44) as an effort factor, appears to be reported as present "permanently" or "quite often" by 44.45%, respectively 55.55% of the subjects.

Possibilities of communication with colleagues exist "as often as desired" (66.66% of

the subjects). That is why this factor, as an effort / risk factor, is very low -1.55.

The activity does not isolate the individual from colleagues "never" (55.55%), isolation representing a demanding factor at a level between very low and low (1.88).

The clarity of the professional role - the clarity of the instructions and the knowledge of the individual responsibilities in the activity - is appropriate and ensures the performance of the activity without negative implications, having a low level (1.55) as an effort factor.

The activity presents a low level of risk of injury to another person (2), to one's own person (1.33) or to some equipment (1.2).

The occupational demands derived from the characteristics of the work task, the conditions for its realization, the work equipment are predominantly of a mental nature and show a high level approaching very high - 4.66.

Among the mental capacities, particularly involved in the performance of the work task, the following stand out: working memory, short and long-term - with a level between high and very high (4.88), as well as attention (concrete in the intense concentration necessary in pregnancy and, respectively, special vigilance) - 4.88.

The staff are also required to have the ability to make quick decisions (at a high level - 4.55), independently (all high level - 4.22), organization and planning skills (level between medium and high - 3.77) and, respectively, the spirit of initiative (high level - 4).

#### 3.3. Evaluation of psychosocial risk factors

Questionnaire for Work Stress Assessment used scales regarding professional demands that recorded answers on a five-points Lickert scale, where 1 represents the lowest level of risk / demand and 5 the highest level.

The evaluation of professional psychosocial factors, stress factors, as well as individual reactions to mental stress recorded the following results: an average level of professional demands (2.56), as a primary stress factor at work, in the composition of which, as secondary stress factors, we can note: time constraints and limitations, with an average level (3.66); demand in the activity – medium level (3.33); the effort in the activity and the method of distribution of tasks, with a level between low

and medium (2.93); the most important secondary stress factor, a component of the professional demands, is represented by the mental demands of the activity, as they are perceived by the staff - high level (4.41).

The relationship between professional stress and the individual reaction to stress was perceived as being mediated by a series of moderating factors (for example. possibilities of control over one's own activity, possibilities of development the and These recorded information). professional demands and moderating factors lead to a stress-satisfaction ratio beneficial for the health and performance of the staff. On the other hand, the subjects did not show somatic or mental symptoms of stress and registered a good level of job satisfaction.

investigated personnel The categories recorded as occupational demands the mental ones, of high level, representing themselves a psychosocial risk factor in the activity. Among the mental demands, involved, in particular, the most important, as factors of the mental effort: memory (working memory and long term memory): attention (focused attention. distributive attention); thinking (analysis and synthesis, decision making, problem solving etc.); interpersonal abilities. The aspects with an important contribution to the level of mental effort are those determined by: responsibility in relation to the results of the activity; the temporal demands (time pressure), sometimes; communication with different types of people.

The Copenhagen Psychosocial Questionnaire application recorded as main psychosocial risk factors: the cognitive demands, temporal demands, sensorial - perceptive demands and work responsibilities (Fig. 1).

The study also used semi-structured interviews to add some valuable depth to the hard numbers. Ninety people from the initial survey took part, sharing their perceptions about work and the stresses of new tech. It was found that 75% of interviewees worried about how well they could use AI, often pointing to a lack of training and resources as major hurdles. The participants also noted that the pressure from these new systems often overshadowed any

positives in their jobs, which added to their stress.

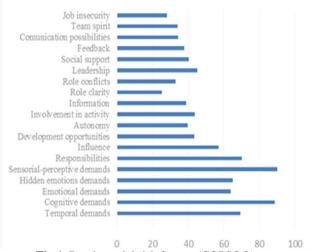


Fig.1. Psychosocial risk factors (COPSOQ)

Figure 2 illustrates the prevalence of employee concerns regarding ΑI digitalization in the workplace. It shows the percentage of employees who express various concerns about AI, with the highest being 75% worried about AI's impact on job security, followed by 65% concerned about AI replacing their roles. Furthermore, 48% report increased concerns compared to the previous year, and 41% are anxious about the rapid evolution of AI technology. The chart highlights significant anxiety among employees regarding job security and adaptation in a rapidly changing technological landscape.

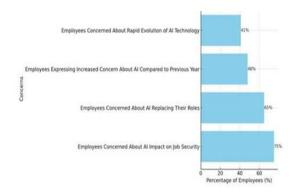


Fig.2. Employees concerns regarding digitalization

#### 3.4. Evaluation of health state

The array of pathology encountered in Research and Education central administration institutions goes from the numerical predominance of musculoskeletal disorders or a significant representation of cardiovascular disorders (mainly hypertension but ischemic heart disease and other cardiovascular disorders like transient ischemic attack) to a lesser representation of gastroenterological disorders (like gastroduodenal ulcer, irritable bowel syndrome). The questionnaires applied to the workers recorded a symptomatology directly related to the specifics of the activity and the working conditions. Visual. postural, neuropsychic overload symptoms were recorded: ocular and mental fatigue; visual and ocular symptoms; muscular and articular symptoms; gastro-intestinal symptoms; sleep problems; impairment of concentration and attention; headaches, etc.

From studying the professional activity of the personnel, two main types of overloads have been more significant: neuropsychic and postural overload. The current Romanian legislation mentions possible links between the postural overload and musculoskeletal disorders, respectively between neuropsychic overload and hypertension and ischemic cardiac disease [10]. On one hand, workers have mainly mentally demanding work tasks, frequently under time pressure, and professional mental effort, which on many occasions result in occupational stress. Occupational stress was correlated with increase in serum cholesterol levels at 5-year follow-up and in a dose-response pattern with increases in blood pressure that maintained also after work [11]. Occupational stress can be related with hypercortisolism, increased level of epinephrine, long term activation of the sympatic nervous system and cardiovascular reactivity, and the last, but not least, maladaptive behaviours such as smoking, compulsive eating, physical inactivity, and low compliance with treatment. A11 these mechanisms also converge towards atherosclerosis [12]. The specialty literature states that worldwide, 55% of stroke-related deaths and 55% of IHD-related deaths are attributable to sub-optimal systolic blood pressure control [13]; ischemic heart disease (IHD) is the most common, serious, chronic, life-threatening disorder in United States. Genetic factors, energy-rich diet, smoking and a sedentary lifestyle are associated with it [13].

Also, it can be emphasized the fact that psychosocial stress is associated in a doseresponse pattern with the development and progression cardiovascular of independent of conventional risk factors and gender [14]. Thus, it is necessary to evaluate both the atherosclerotic cardiovascular disease 10-year risk – the risk of developing a myocardial infarction, a cerebrovascular accident or cardiovascular death at 10-year distance - in workers and the psychosocial factors / stress factors present in workers. Occupational stress is a cardiovascular risk modifier that multiplies the risks at threshold by a number between 1.2 and 2 [15].

On the other hand, the prolonged sedentary and vicious work postures at the computer are present. According to medical literature, low back pain is the number one cause of years lived with disability in USA, and the most common cause of disability in patients under the age of 45; neck pain is the number four cause of years lived with disability [16]. Hence, both the neuropsychic and postural overload are important contributors to cardiovascular and musculoskeletal disorders.

The last, but not least, it should be noticed a link between the exposures to mesophilic, hemolytic and fungal bio-aerosols at the workplace and several respiratory disorders, conjunctivitis, infectious or allergic in nature, in workers. Thus, the impact of occupational hazards and overloads on employees' health is significant.

## 4. CONCLUSIONS

In conclusion, it can be stated that there are factors of neuropsychological demand that could influence the health status of workers and that this demand is specific to the work load of the staff in the central administration of the R&D and education fields, medium level in most routine situations, and increased or very increased in the case of peak mobilization carried out under conditions of increased difficulty and responsibility.

In both professional categories from the R&D and education fields neuropsychic and postural overloads have been found and these overloads are important contributors to the significant

proportion of musculoskeletal and cardiovascular disorders present in workers.

The evaluations of atherosclerotic cardiovascular disease 10-year risk and of the psychosocial factors / stress factors in workers are strongly recommended, being part of a preventive health policy at the workplace. In highlight order causality between occupational risk factors derived from activity's content and conditions, eliminating bias of individual factors, and physical and mental health of the personnel, longitudinal studies are needed. A large portion of an individual time, especially in their working age, is spent at work and has effects on health for lifetime.

This study underscores the importance of integrating psychosocial risk assessment and management into organizational health strategies, thereby contributing to enhanced employee satisfaction and productivity. Furthermore, the findings hold significant relevance for healthcare by highlighting the addressing mental necessity of proactively in workplaces, suggesting that improved organizational practices can lead to healthier work environments and reduced healthcare costs. Overall, this research not only reflects the critical need for ongoing dialogue about mental health in professional settings but also provides actionable insights that could drive policy changes and contribute to development of supportive frameworks within these essential fields.

The findings underscore the pressing need for organizations to implement support mechanisms tailored to the specific challenges that stem from technological evolution. Workplace health strategies, in essence, must evolve alongside digital progress to protect employee welfare. Ultimately, this study, by analyzing both survey results and qualitative insights, brings to light key patterns with notable implications for workplace policy and practice. Organizations that recognize the psychosocial challenges their personnel face can craft targeted interventions to foster a healthier work environment, potentially increasing productivity and improving employee retention. While limitations exist (e.g., potential response bias from self-reported data), these findings provide valuable insights to the ongoing

discussion about managing psychosocial risks as AI and digitalization advance. Therefore, the data presented here serves as a starting point for future research and organizational strategies, all aimed at helping employees thrive amidst the complexities of modern work.

#### 5. DISCUSSION

The findings notably showed that participants experienced moderate to high psychological stress levels. These stress levels were associated with high mental demands coupled with low autonomy. Separately, health evaluations exposed a significant impact of occupational hazards and overloads on employees' health. Although most employees conveyed job satisfaction tied to the meaningfulness of their jobs, they also pointed to time pressure as a considerable stress source, thereby complicating their experiences at work. This mirrors earlier research, which emphasized that feeling valued while managing extreme workloads may potentially worsen mental health issues [5]. The influence of AI-centered changes was consistent with prior studies into the psychological impact when workplaces adopt technology. importance of these discoveries lies within their suggestions to create targeted interventions to improve employee wellness when dealing with evolving workplace dynamics that stem from AI and digitalization. Moreover. the underscores the critical need for R&D and education organizations and the central administration of these domains to actively handle working conditions, as the negative psychosocial results described could cause longterm health effects, which in turn influence job retention rates and overall productivity. Results further highlight integrating psychosocial assessments into organizational health policies to foster proactive support networks. This research adds to the expanding collection of literature which stresses the significance of dealing with mental health within the workplace during technology shift periods. It serves as a basis for forming all-encompassing strategies that align employee wellness to organizational strategic goals. Comprehending the intersection between digitalization and psychosocial health has significant effects on stakeholder growth, making it a necessary area of focus for prospective organizational research and policy creation.

Given the transformative influence of AI and digitalization on well-being in both research and development (R&D) and educational sectors, findings concerning work-related psychosocial factors carry particular weight. The data collected via surveys and interviews - revealed that employees are grappling with significant psychosocial issues that impact both mental health and work satisfaction. Notably, the participants reported heightened stress because of increased workloads and the demand to adapt to emerging technologies. Furthermore, some of them expressed feelings of anxiety and uncertainty about their roles as digital tools become increasingly central to their daily tasks. These results generally support prior studies indicating that technological advancements can heighten workplace stress, especially in sectors requiring rapid adjustment [1]. Studies in educational settings similarly demonstrate that educators voice concerns regarding emotional effects of digital transitions [2].

These outcomes add to the expanding literature on workplace psychology, highlighting the organizational need to understand the psychosocial consequences of digital transformation. Practically, a greater understanding equips organizations with the ability to implement strategies designed to improve employee well-being amid these shifts. Organizations are encouraged to develop interventions that build resilience and offer tailored support for employees affected by digitalization. Addressing these factors not only helps individual health but also improves organizational performance, showing employee well-being is integral to achieving strategic aims. Previous work has stressed the need to cultivate supportive environments that lessen stressors, meet employee expectations, and acknowledge complexities arising from new technologies [6]. This point is especially salient in R&D and educational environments, where engagement is closely tied to success. Moreover, a deeper understanding of digitalization's psychosocial impact becomes key for building workplace cultures that value mental health. Focus on professional growth, support networks, and routine feedback are vital for mitigating the adverse effects of workplace stress. Ultimately, our study underscores the necessity for organizations to strategically align their policies with the evolving challenges within digital workplaces, ensuring sustainable employee health and engagement. As such, this study informs current practices and paves the way for further research into the psychosocial consequences of technology on well-being across diverse sectors.

The connection between these psychosocial factors and overall health reflects broader discussions in the literature, which has linked high-stress environments to greater risk of cardiovascular and musculoskeletal disorders. When comparing with other experiences from personnel across countries resonate, organizational support appearing as a factor against workplace stress. For example, Leka et al. [4] emphasize how a positive organizational culture greatly aids employee resilience when faced with technological challenges. Also, individual personality traits like openness and conscientiousness - were found to influence stress levels and coping strategies among professionals, reinforcing our study's findings [6]. This highlights importance of tailored interventions occupational health strategies, accounting for individual differences. Theoretically, this research extends to occupational safety and health, but also to organizational and work psychology. It suggests organizations should adopt a detailed grasp of how digitization reshapes the labor landscape. The findings underscore the need for thorough health and safety policies. Such policies should prioritize psychosocial risk assessment, as supportive workplace interventions have demonstrably improved emotional health. It is key that these policies provide management training to spot signs of distress and implement measures to foster a supportive environment. It is vital to ensure tech advances do not leave employee welfare initiatives behind. Broadly, these insights feed into a growing body of work advocating for strategic organizational frameworks and personalized support to improve personnel well-being in central administration of R&D and education's changing context.

# **Limitations of the study**

The study's reliance on self-reported data could bring about bias, as employees might downplay stress or exaggerate job satisfaction, influenced by social expectations. Also, being a cross-sectional study, it's tough to firmly establish cause-and-effect relationships between the psychosocial stressors identified and employee health outcomes something longitudinal studies often show. The sample size was adequate; however, it might not fully capture the diverse nature of the workforce across all the sectors the research aimed to cover. This naturally could limit how widely applicable the findings are to the broader R&D and education communities. Moreover, the primary focus on Romanian employees might overlook the cultural or structural differences found in other regions or industries, possibly restricting the international relevance of these findings. Nevertheless, the implications are considerable: Organizations need to prioritize the optimization of working conditions and the mental health strategies within their operations to tackle the evolving psychosocial risks that come with digital technologies. Going forward, research should use longitudinal approaches to better understand the long-term effects of technology integration on employee mental health and their productivity. It would be beneficial to examine how individual traits and organizational culture intersect, providing a more detailed view of how different employees' experiences technology impact their overall well-being. Also. exploring how effective tailored interventions are at addressing specific psychosocial risks can lead to the development of more useful workplace strategies.

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# Factori psihosociali profesionali pentru personalul din administrația publică în domeniile cercetare - dezvoltare și educație

Lucrarea prezintă unele rezultate ale unui studiu aplicativ referitor la condițiile de muncă, efortul profesional și factorii psihosociali pentru activitatea personalului din domeniile cercetare - dezvoltare și educație. Studiul a avut ca obiective analiza condițiilor generale de muncă și a factorilor de efort, inclusiv a celor de natură psihosocială. Metodologia a avut un cacarter multidisciplinar, constând în: analiza conținutului sarcinii de muncă și a condițiilor de desfășurare a activității, evaluarea factorilor de efort profesional (mental și fizic); analiza factorilor psihosociali; analiza stării de sănătate. Rezultatele au evidențiat nivelurile unor factori psihosociali de risc în cadrul activităților studiate, factori de risc care pot determina stres profesional.

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