

Stress management in a multi-project environment

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Abstract

The paper is devoted to an important aspect, influencing the effectiveness of the project teams in a multi-project environment, and more concretely it tries to demonstrate the necessity of management of stress, as well as to identify opportunities for this. The authors focus consecutively on aspects such as: stress management as a factor of effectiveness of the project activity in a multi-project environment, explaining the essence and importance of the professional stress as a psychological phenomenon, the negative consequences of the stress and the potential stressors at the work place; necessity of stress management in a multi-project environment, explaining the essence and characteristics of the multi-project organization as a natural environment of the project teams and presenting this type of environment as a stress factor; opportunities for stress management in a multi-project environment, including organizational mechanisms and psychological techniques for stress management.

Keywords: professional stress, project team, multi-project environment

1 Introduction

In recent decades the project work spread in almost all business and non-profit spheres – it is extremely difficult to find out some area, which does not apply projects as effective means for realization of the organizational mission, strategic and short-term goals, through maximum utilization of the available resources [1]. Gradually the project management established as an actual management conception with indisputably increasing importance, shaping the face not only of the contemporary business, but also of the society as a whole, more and more frequently presented as “project-oriented society”.

The striving for optimization of the project work provokes continuous development of more and more complicated and perfect computer programs and methods for cost and time planning and control. However, among all the resources, necessary for the realization of a project, the most important are the human resources and for this reason, the project team is unanimously identified as a key factor of success [2]. It is confidently declared that the traditional approach is anachronism and that the focusing on detailed planning and control systems, as well as the classical criteria for project success, connected with time, quality and cost, do not reflect adequately the challenges, presented from the new business environment [3]. The projects are not only “technical systems”, but “behavioral systems” as well and for this reason it is logically the contemporary project management to focus more and more on their “human” aspects, connected with communications, leadership and other elements, oriented towards people and processes.

At the same time, despite its extreme importance and complexity, the human resource management remains the most poorly developed aspect of the project management, saturated with lots of ambiguities and contradictions. Especially scarce is the knowledge in the field of the project team management in a multi-project environment, which delineates as a natural work environment of more and more employees. On one hand, it obviously adds extra complexity to this process, and on the other hand – its effects still remain not investigated enough as possible consequences for the

project participants, nor as possible solutions in connection with the management of their behavior. In this context, the present paper is devoted to one important aspect, influencing the effectiveness of the project teams in a multi-project environment, and more concretely, it is trying to demonstrate the necessity of management of stress, as well as to identify opportunities for this.

2 Stress management as a factor of the project work effectiveness in the multi-project environment

Professional stress is treated as a basic factor of the work activity effectiveness, including the project work. This determines the necessity of searching effective mechanisms for its management, which involves its recognition as a psychological phenomenon, consequences and potential sources, and also as a specificity in a multi-project environment.

2.1 PROFESSIONAL STRESS – NATURE AND SIGNIFICANCE

The term “stress” could be defined as:

- a constraining force or influence (pressure, strain, tension);
- a state resulting from a stress - one of bodily or mental tension resulting from factors that tend to alter an existent equilibrium;
- a state of mental tension and worry caused by problems in life, work, etc. [4].

The Canadian endocrinologist of Hungarian origin Hans Selye studied in details all the specific responses of the organism to stressors. Selye defined the stress in 1936 as “the nonspecific response of the body to any demand, whether it is caused by, or results in, pleasant or unpleasant conditions.” Later he gives a definition of the stress as a state of the organism manifested as a general adaptation syndrome (GAS). In this sense, the adaptation is the capacity of the organism to restore and maintain the internal balance when the homeostasis is threaten by external stressors [5].

2.2 NATURE OF STRESS AS A PSYCHOLOGICAL PHENOMENON

Stress is our inner response to circumstances which challenge us to adapt to change. Richard Lazarus and Susan Folkman suggested in 1981 that stress can be thought of as resulting from an "imbalance between demands and resources" or as occurring when "pressure exceeds one's perceived ability to cope".

Stress at work shall be defined as the damaging physical and emotional responses that could be a result of a conflict between the requirements of the work and the degree of control that the employee has over meeting these challenges. The combination of high requirements at the workplace and low level of control over the situation could generally lead to stress.

Work-related stress is defined as "the adverse reaction people have to excessive pressures or other types of demand placed on them at work" [6]. It could have different origin or be a result of a single event. People experience stress at work when they perceive that there is an imbalance between the demands made to them by their work and the physical and mental resources they have available to cope with these demands. Such resources can be as simple as having enough time to do all the work required or might involve being able to deal with an emotionally challenging role. Although the experience of stress is psychological, stress also affects people's physical health [7].

2.3 POTENTIAL STRESSORS AT THE WORKPLACE

According to a survey done by the European Agency for Safety and Health at Work, more than 50% of the employees' state that the occupational stress is often presented [8]. According to the interviewed, the main causes for stress are the job insecurity and the reorganization of the working place.

Among the many stressors at the workplace mentioned by the employees, the most common potential sources of pressure are [9]:

A. Work overload (the demands of the workload and the associated time pressures):

- unrealistic deadlines and expectations;
- technology overload;
- unmanageable workloads;
- under recruitment of staff for work already timetabled.

B. Control (lack of influence and consultation in the organization and performance of work):

- lack of control over aspects of the job and lack of time;
- lack of involvement in decision making;
- the staff ideas/suggestions about the job are not taken into account.

C. Job security (lack of job security and frequent job changes):

- job insecurity;
- temporary/fixed term contracts;
- possible job change;
- fear of skill redundancy.

D. Work relationships (poor or unsupportive relationships with colleagues and/or supervisors). Poor work relationships could be a result of:

- aggressive management style;

- unfair treatment;
- manager always finding fault;
- lack of support from others;
- aversive behavior, e.g. bullying and harassment;
- lack of understanding and leadership;
- isolation at work.

E. Work-life balance (the demands of work affecting personal and home life):

- work interfering with home/personal life;
- being expected to or having to work additional hours at home to the detriment of personal, partner and family relationships;
- excessive travel time;
- over-demanding and inflexible work schedules.

F. Resources and communication (lack of appropriate training, equipment and resources in order to perform effectively the work; lack of adequate information and recognition). Stress may result from lack of:

- information about what is going on in the organization;
- adequate training/equipment/resources to do the job;
- feedback on performance and appreciation on behalf of the managers.

G. Pays and benefits

The pays and benefits associated with a job are important in terms of lifestyle and often perceived to be an indication of an individual's value to the organization. Although financial reward may not be a prime motivator, it could become a factor if there are other negative aspects of the job [10].

These stressors are confirmed also by different studies of the University of Cambridge [11].

2.4 NEGATIVE CONSEQUENCES OF WORK STRESS

Stress at the workplace could affect the employees, as well as the employers. Stress in one person can also lead to stress in staff that have to work with the person or even cover for the colleague. Because of stress, the staff members would perform their tasks worse leading to financial losses and reduced physical and mental health. The work performance decrease, the absences because of illness and the clients' complaints increase [12]. The costs of stress may show up as high staff turnover, an increase in sickness absence, reduced work performance and poor timekeeping. Managers who do not take stress seriously may leave them open to compensations claims from staff who have suffered ill health from work related stress.

High levels of stress at the workplace could result in:

- Poor decision-making;
- Increase in mistakes that will lead to more clients' complains - this would generate more stress;
- Increased sickness absences;
- High staff costs;
- Poor workplace relations.

Stress can affect the business:

- Lost working days;
- Low morale;
- Reduced work performance.

It can also affect individual workers':

- Work performance;
- Physical and mental health and wellbeing;
- Relationships [13].

2.5 NECESSITY OF STRESS MANAGEMENT IN THE MULTI-PROJECT ENVIRONMENT

The contemporary organization is more and more oriented to application of a project approach in the implementation of a big part of its activities. This often leads to the existence of a great number of varied, simultaneously realized projects – it turns out that about 90% of all projects are realized in a multi-project environment. In the course of time the researchers come up to the conclusion that besides all advantages of the project work, its realization in this type of environment actually is characterized by many potential negative effects upon the psychological condition of the project participants and hence – upon the effectiveness of the projects. At the same time, these effects are still not investigated enough by the work psychology, which determines the necessity of directing more attention towards their specificity.

2.6 NATURE AND CHARACTERISTICS OF THE MULTI-PROJECT ORGANIZATION AS A NATURAL ENVIRONMENT OF THE PROJECT TEAMS

The multi-project organization is such type of organization, which strongly privileges the project dimension and executes many activities in the form of projects. At every moment, it realizes many varied projects with different characteristics and at different stage of their life cycle. Some of them are connected with development of products, others – with organizational development, third – with marketing, etc. Some of them are very large (executed by big teams and consuming many resources) or urgent, and respectively can be provided with own resources, but most of them are small, so they should rely on common resources. Despite the intensive project work, the organization keeps its functional principle of working, i.e. it has a permanent functional structure, in the frame of which the “temporary” projects are integrated. Although the projects are not basic organizational activity, they share common resources and systems (personnel, equipment, infrastructure, management, technology, knowledge, products, clients, communication, control, administrative service, etc.) with the basic functional organization [14]. This means that the multi-project organization is not connected with predomination of the project structures over the functional structure, and on the contrary – these structures temporarily complement it, without replacing it. Although the projects are always realized in support of the basic functional organization, a permanent tension exists between the static and the dynamic (temporary) structure.

2.7 THE MULTI-PROJECT ENVIRONMENT AS A STRESS FACTOR

The researchers consecutively turn their attention towards different aspects of the multi-project environment and come to many conclusions. They summarize them in several main problems created by this environment - for the project managers, the employees, and the organization as a whole. With respect to the employees it turns out that, the multi-project environment creates extremely unfavorable work situation. In fact, some authors underline the positive effects

of this environment, saying that the project work is inherently more interesting for the people, in comparison with the routine, as it is more dynamic and gives independence. Besides this the support and solidarity, which they receive from their colleagues in the project team and from the organization as a whole, are additional motivational factors, stimulating stronger commitment to the organizational goals and higher satisfaction. Probably because of this, many investigations find out that among the project participants it is observed lower turnover, compared to those that do not work on projects.

Nevertheless, according to the most authors, the multi-project environment creates extremely intensive work load, which can have strongly negative effects on the health, the professional development and the opportunities to balance work and personal life of the employees [15]. It is underlined that the combining of many parallel activities, the high work intensity and increased individual responsibility can provoke healthy problems, feeling of overload, difficult synchronization of the professional and personal engagements and interests, and ultimately more stress for the employees [16]. They are often included in new projects, before finishing “the old” ones, and should continuously divide their working time and attention between their usual job engagements (presented in the job characteristics) and the project engagements (included in the so-called work packages). This could turn into a permanent source of intra-role conflict, tension and even feeling of hopelessness and weakness. On one hand, the simultaneous participation in many projects and especially the switch between many varied activities leads to loss of focus and a necessity of adjustment of the thinking, which increases the duration of the task execution and causes a project delay. On the other hand, the excessive workload quite often has negative consequences upon the personal life of the project participants (out of the working time), since the project requires a certain goal to be reached, no matter whether in the frame of the 8-hours working day or not. The high level of uncertainty and the permanent changes in the project goals and requirements can create role ambiguity and frustration in the project participants. Along with this, the temporary character of the project troubles the building of interpersonal relations and contacts, which not rarely leads to disintegration of the teams to smaller groups, working independently and confronting each other. It turns out that the multi-project environment can acquire so negative dimensions as to provoke dissatisfaction, stress and even personnel turnover.

3 Opportunities for stress management in the multi-project environment

From the theory and from the practice is known that the staff members have a better performance at the workplace when they are relaxed, in harmony and in emotional equilibrium. Therefore, it is extremely important to take measures for overcoming the occupational stress and regain the emotional balance of the managers and the members of the project teams.

Stress management was developed and premised on the idea that stress is not a direct response to a stressor but rather one's resources and ability to cope mediate the stress response and are amenable to change, thus allowing stress to be controllable [17].

Workplace stress consequences could be met with appropriate stress release techniques and work-related psychosocial risks can be successfully managed. The measures for reducing the stress could save significant financial resources to the organization.

There are many options for stress management in the multi-project environment, treating the stress sources as well as its effects.

3.1 ORGANIZATIONAL MECHANISMS FOR STRESS MANAGEMENT

The organizational mechanisms for stress management in the project team are directly connected with the elimination

TABLE 1 Possible positive manager’s attitude in response to different stressors

Stressors	Manager’s positive attitude
<i>Professional requirements/workload</i>	<ul style="list-style-type: none"> • Paying attention to project team members capabilities and competences and providing training where is needed; • Monitoring the workload, developing workload plans/schedules and setting realistic deadlines; • Applying an effective approach for problem solving; • Processes monitoring in order to improve them; • Encouraging the position rotation/job enrichment.
<i>Control</i>	<ul style="list-style-type: none"> • Ensuring the employees that they can do their job/empowerment; • Coaching instead of pressure; • Recognizing the necessity of simple support or counseling for the project team members; • Providing an opportunity for regular meetings with the project team members; • Encouraging the project team members’ development.
<i>Role/resources and communication</i>	<ul style="list-style-type: none"> • Informing the team for everything that happens in the organization; • Formulating clear goals and objectives; • Clearly defining roles, expectations and communication channels; • Holding regular team meetings and face-to-face communication.
<i>Support</i>	<ul style="list-style-type: none"> • Respecting the working hours; • Providing recognition for the efforts and the work of the team members; • Developing organizational culture of non-judgment and strategic problem solving; • Flexibility in the team members’ support; • Showing awareness for the team members’ workload outside the project engagements; • Providing training and development, promotion and regular face-to-face meetings; • Giving support and counseling.
<i>Work relationships</i>	<ul style="list-style-type: none"> • Objective listening to both parts in a conflict (lat. “audiator et altera pars”); • Giving support and investigation of the complaints; • Overcoming the conflict at the initial stage and taking measures; • Introducing a positive approach in peace keeping when there is tension; • Keeping team members’ personal problems confidentiality; • Treating equally all project team members.
<i>Change</i>	<ul style="list-style-type: none"> • Providing regular meetings and communication with the team; • Formulating clear goals, objectives and expectations; • Providing information and consultations on time; • Providing adequate support and training; • Paying attention to the group dynamics and the physical work environment/positioning.

3.3 IMPROVING THE PROJECT TEAMS STAFFING

In a multi-project environment, the process of forming (staffing) project teams is often not very effective for many reasons. For example, not rarely the planning is done at a single project level, without taking into account the other projects, the permanent work and the capacity of the organization, as it is taken a priory that the participants will have a high qualification and motivation and will be 8 hours a day available for the project. The mistakes in the planning of the necessary human resources could provoke unrealistic reduction of the team staff, which results in stress for the participants, troubles the execution of the project plan and respectively leads to a delay of the project or deterioration of the quality.

The mistakes in the formulation of the criteria for selection of participants can lead to a choice of people with inappropriate

(reduction) of its causes.

3.2 IMPROVING THE MANAGER’S ATTITUDE

There are several causes for occupational stress that could be related to the work and others have their origin in the individuals’ personal life. In both cases, the responsibility for stressors identification and taking measures for overcoming them at individual and organizational level is for the manager.

In Table 1 are presented some of the stressors and the measures that the manager could undertake in order to neutralize them.

competencies, too engaged with other projects or current activities, or just not motivated to participate in the project.

In general, the ineffective staffing results in teams with inappropriate as a quality and quantity participants – with inadequate qualification to the requirements of the project (too low or high) or with excessive engagement in other projects or in their functional department. Therefore, through improvement of the staffing it is possible to achieve optimal distribution of the human resources between the projects in the organization, which could prevent (or even reduce) their excessive work load and respectively all arising negative effects upon their psychological comfort, productivity and development.

The projects essentially differ according to their complexity and the contents of the activities included; therefore, it is logically the competencies and the personal (psychological)

characteristics of the participants to be very different. Practically the type (characteristics) of the project itself should determine the profile of the successful project team, i.e. the suitable combination of participants as professional skills, as well as personal characteristics and preferences. On this basis, it can be expected that the improvement of staffing is one possible instrument for reduction of stress and increasing the effectiveness of the project teams.

3.4 IMPROVING THE PROJECT TEAMS MANAGEMENT

Not always the project managers are successful in the team management for many reasons. For example, sometimes they lack skills in the specific technical area of the project, which prevents the instructing and training of the participants, in case of necessity. It is also possible to lack management skills – in the area of administrative management (planning, organizing and controlling the work, including delegating tasks and holding team meetings) and leadership (coping with the interpersonal dynamics, conflicts and motivation, including providing systematic support and encouragement “along the way” to the goal). It is also possible the project managers to demonstrate sustainable preferences towards a certain management model/style, no matter if it is suitable or not – for example, some of them underrate the administrative aspects of management at the expense of the leadership, and others have obvious affinity towards the administration and respectively neglect the importance of the leadership. All this creates prerequisites for stress and dissatisfaction of the project team members and eventually troubles the realization of the projects in the frames of the determined requirements for time, cost, and quality. Therefore, the improvement of the team management through provision and application of a suitable collection of competencies and management style should also be examined as a possibility for stress management in a project environment.

3.5 PSYCHOLOGICAL TECHNIQUES FOR STRESS MANAGEMENT

Stress management can be complicated and confusing because there are different types of stress (acute stress, episodic acute stress, and chronic stress) and each of them has its own characteristics, symptoms, duration and treatment approaches [18].

According to Selye, the problem is not to avoid or eliminate stress but to protect us from the harmful stress (distress). It could be overcome not by avoiding work and efforts but by engaging in activity that is motivating and pleasant for us. Distress is not related to the working hours or the work complicity but to the degree of work dissatisfaction [5].

It is important to learn to recognize the stressor. After recognizing it there are two possibilities: to avoid the stressing situation or if it is inevitable – to deal with it by confronting it or overcoming it (for example, by changing the response). There should be considered the following rules:

1. if the bad news, the dissatisfaction and the injury are not controlled at conscious level, they are absorbed by the subconscious mind and could manifest in non-

predictable and destructive way;

2. the psychological reserves are found in the individual's emotional sphere that is related to his needs - if a certain need is not satisfied there are negative emotional reactions;
3. the individual's self-control in stress management is more effective if it is combined with the following stages:
 - feels and is aware of the beginning of the stress;
 - preventing from stress conquering the whole individual's psychic sphere, set into motion the self-regulation;
 - including other type of activity in order to release the tension.

Some concrete psychological techniques for stress management are:

A. At personal level

- Tracking the stressors and reactions;
- Developing healthy responses – exercise, yoga, breathing, mindfulness, good sleep, limiting caffeine intake;
- Establishing boundaries – work-life boundaries;
- Taking time to replenish and return to the pre-stress level of functioning – work disconnecting;
- Taking support from family members and friends;
- Resisting perfectionism;
- Flipping negative thinking;
- Looking for humor in each situation.

B. At organizational level

- Support from the supervisor;
- Support from co-workers;
- Prioritizing and organizing – developing balanced schedule, balancing between work and personal life, prioritizing tasks;
- Planning regular breaks – short breaks throughout the day to take a walk in order to be more productive;
- Breaking projects into smaller steps;
- Delegating responsibility;
- Making compromises;
- Manager acting as a positive role model if he/she remains calm in stressful situations;
- Clarifying expectations – sharing information with project team members, giving clear definition of team members' roles and responsibilities;
- Giving more opportunities to team members' to participate in decision-making;
- Making management actions consistent with organizational values;
- One-to-one communication opportunities and attentive listening;
- Praising good work performance verbally and organization-wide.

Stress management should be integrated in the everyday management by developing systems for psychological prophylactic and focusing on intensification of knowledge and skills necessary for developing psychological competences in stress management.

4 Conclusion

The basic criteria for effectiveness of the project teams in a multi-project environment could be summarized as follows:

1) successful realization of the project – i.e. short-term benefits for the organization; 2) elaboration of the individual competencies – personal and professional development in the process of project work – i.e. long-term benefits for the organization; 3) satisfaction of the participants – a result of the received rewards, the opportunity to work on tasks which they like, as well as to elaborate their competencies and/or to progress in their career. At the same time the multi-project environment creates many obstacles in front of the

given criteria. One of the essential reasons for the unsuccessful realization of the projects is the stress provoked by the simultaneous participation in too many projects, each of them having strict restrictions regarding budget, time and quality. Therefore, the management of stress in the project team is an important factor for elaboration of the project work. Fortunately, there exist many possibilities for this.

References

- [1] Kerzner H 2013 *Project management – a systems approach to planning, scheduling, and controlling* John Wiley & Sons Inc.
- [2] Newton P 2015 *Managing a project team. Project skills* **Accessible at:** <http://www.free-management-ebooks.com/> [24.03.2017]
- [3] Knight J 2016 *Project management: project management, management tips and strategies, and how to control a team to complete a project*
- [4] <https://www.merriam-webster.com/dictionary/stress>
- [5] Dimitrova V 2013 *Psychology of management* Academic publishing house of UARD, Plovdiv
- [6] https://www.ucu.org.uk/media/5911/Higher-stress-a-survey-of-stress-and-well-being-among-staff-in-higher-education-Jul-13/pdf/HE_stress_report_July_2013.pdf/
- [7] *European Agency for Safety and Health, Managing work-related stress and psychosocial risks E-guide, at Work* <https://osha.europa.eu/en/tools-and-publications/e-guide-managing-stress-and-psycho-social-risks/>
- [8] <https://osha.europa.eu/en/surveys-and-statistics-osh/>
- [9] Somaz W H, Tulgan B 2003 *Performance Under Pressure: Managing Stress in the Workplace* Canada, HRD Press Inc.
- [10] Cartwright S, Cooper C 2002 *ASSET: An Organisational Stress Screening Tool - The Management Guide*. Manchester, RCL Ltd.
- [11] <http://www.admin.cam.ac.uk/offices/hr/policy/stress/causes.html>
- [12] *Reducing Work Related Stress. A Guide for Managers*, Deakin University
- [13] *European Agency for Safety and Health, Managing work-related stress and psychosocial risks E-guide, at Work* <https://osha.europa.eu/en/tools-and-publications/e-guide-managing-stress-and-psycho-social-risks/>
- [14] Keegan A, Turner J 2003 *Managing human resources in the projectbased organization, People in Project Management* Aldershot: Gower Publishing Limited
- [15] Packendorff J 2002 *The temporary society and its enemies: Projects from an individual perspective* in K. Sahlin-Andersson, A. Söderholm, Beyond project management: new perspectives on the temporary - permanent dilemma, Copenhagen Business School Press
- [16] Donnelly R 2006 How "free" is the free worker: An investigation into the working arrangements available to knowledge workers, *Personnel Review* 35(1)
- [17] Lazarus R S, Folkman S 1984 *Stress, Appraisal and Coping* New York: Springer
- [18] <http://www.apa.org/helpcenter/stress-kinds.aspx>