Original article

THE RESEARCH OF BEHAVIORAL PROJECT MANAGEMENT COMPETENCIES

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Abstract: One of the key advantages of every employee is the possession of adequate competencies. Knowledge, accurate, comprehensible, relevant and correct information, as well as consistent communication with other employees, are of crucial importance. The improvement of any competence, whether behavioral, technical or contextual, directly affects the personal development of employees, and has an impact at the individual and at the organizational level. Behavioral competence in project management implies the behavior of employees when achieving individual and group goals. This article refers to *behavioral competencies in project management* in particular. Data were collected through empirical research, to investigate the presence of behavioral project management competencies of individuals and its application in certain situations. The findings showed that the behavioral competencies that are present the most are: communication, teamwork, leadership, openness, and ethics.

Keywords: behaviorism, competencies, project management, research.

1. Introduction

In today's world, it is essential to have the basic competencies for project management. Acquiring basic knowledge about management competencies, whether projects, portfolios or programs, implies a certain foundation in terms of having skills and techniques for managing projects, and the ability to adapt to an uncertain environment. A project manager should understand and continuously develop essential competencies to meet the set of project goals and respond to the conditions of the competitive environment. If the manager does not understand a certain competence, this could lead to numerous risks and increase the probability of negative impacts on the project.

The article includes a theoretical background of project management competencies, with the focus on behavioral competencies. The research part contains empirical research that collected different answers from situational questions, where respondents had the opportunity to evaluate themselves in the field of project management. This is followed by the research results analysis, key findings, and guidelines for better employee performance are presented.

2. Competences

In the past twenty years, the competencies of project managers have gained importance. In education, professional certification, and various training programs, the competence approach presents the future for project managers. The dominant field where this topic is further clarified is the human resources field. Competencies include the skills, techniques and abilities that project managers, as well as managers in general, possess and apply in their work.

Competencies, whether technical, behavioral or contextual, concern our abilities. They are crucial for human resources development, and communication in the organization, and affect

the efficiency, effectiveness and productivity of employees. Understanding and applying competencies is a fundamental process in developing human resources. Knowledge, skills as well as attitudes enable employees to present a specific type of behavior that results in a positive work outcome (Whiddett, & Hollyforde, 2010).

Competencies that appear today in the field of project management most often contribute to the following values (adjusted according to Ivanković, 2019):
● Realization of public interest;
● Strengthening legality and legal certainty;
● Development of project management;
● Compliance with professionalism;
● The principle of strengthening personal responsibility;
● Introducing the concept of management and social responsibility;
● Strengthening integrity;
● Application of ethical standards.

Changes in technology, improvement of products and services, and the level of the gap that occurs between the competencies of employees that are predefined by standards and the actual competencies that employees possess and apply, require from the organization to continuously invest in employee training in order to reduce this gap to a minimum.

Today, in any sphere of business, we can notice that competences are expanding more and more. Namely, an adequate set of knowledge and skills, i.e. behaviors, characteristics, decisions, abilities, and attitudes, define if a person possesses competencies and performs his job properly. The goal is not only adequate knowledge but also their appropriate application in certain circumstances. When talking about competencies, two types of competencies can be distinguished (Ivanković, 2019):
1. Competencies related to the employee's position
2. Competencies related to the employee's behavior at the observed workplace

The first type of competence is about job descriptions and what the employee should perform. The second type of competence refers to employees' behavior, abilities, and attitudes within the scope of the observed workplace. In English, an essential distinction is made between these two types. Competence-as a detailed description and plan of work tasks, while Competency-is, the behavior of employees. These terms are used both in domestic and foreign literature. Competencies related to the employee's workplace are also called technical competencies, while competencies related to the employee's behavior are behavioral competencies.

To be able to analyze employees' competencies adequately, these competencies must contain specific terminology that is recognized within the organization so that in the future there will be no disagreement between them. The concept of competencies and their application is increasingly accepted globally and has a distinct growth trend in various business spheres. In the past, only a record was kept of what work was done, but today a point of view is increasingly adopted that investigates how the work was done and how the set goals were met. Competencies correspond to the requirements of workplaces and concern the knowledge and abilities of employees.

Competence (according to IPMA ICB, 2015) is the comprehensive application of knowledge, skills and abilities to achieve desired results. The following concepts of knowledge, skills and abilities will be explained.

Knowledge presents all information and experiences that an individual possesses. One can take the example of knowing the concept of a Gantt chart as an example of an individual's knowledge.

Skills are specific technical knowledge that enables an individual or employee to perform a job. An example can be drawing/creating a Gantt chart.

Competencies imply the effective delivery of knowledge and skills in a given context. An example is the successful design and implementation of the project schedule. These three concepts are related, and competence includes the relevant skills and expertise, but also includes their application in practice in the

right way at the right time. The competencies that will be examined in the questionnaire are adapted based on generic framework and standard of competences, IPMA fundamental individual competencies and other internationally recognised competencies for project management.

2.1. Behavioral competence for project management

The project is a complex and comprehensive undertaking whose characteristics and goals can be determined precisely (Jovanović, 2015). If we decide to direct our interests towards the concept of project management, it is essential to see every segment of this area. They start with an understanding of the roles in the project organization, an understanding of specific tasks performed at the workplace, and specific risks that may hurt the realization of the realization. Depending on the project scope and size, the defined tasks must be simple or complex (Yarbrough, 2021).

Behavioral competencies refer to behavior of people and groups. If it originated as a term in psychology, this approach is today widely applied in other fields as well (Mihailović et al., 2006). Behavioral competencies in project management are based on the fulfillment of both individual and organizational goals.

The most critical competencies within the framework of competencies are (CIPD, 2007; Ivanković, 2019):
- Communication skills 63%
- People Management 59%
- Teamwork 58%
- Client management 54%

2.1.1. Leadership

Leadership as a behavioral competence can be understood as an ability to manage a team and employees. A leader can get people in the organization to follow his defined steps. Leadership is also the skill of managing ourself, as well as others in the organization. A leader is a person in an organization who has the power to make other people follow his suggestions, but not only to follow, nor to successfully implement the tasks delegated to them. There is often a debate on whether a leader is the same as a manager? Leadership and management are two different things. It can often be seen that in most organizations there is too much management and a lack of leadership.

The phrase "laissez-faire" (non-leadership factor) is often mentioned in the literature, where employees get the opportunity to make decisions at their level of the hierarchy. This term is based on eliminating the needs of subordinates. In this regard, it is not treated as a factor of transactional leadership but as an example of ineffective leadership (Yukl, 2013).

When we consider that the behavioral approach to leadership can be viewed from two aspects, one as a task-oriented leadership style, and the other as a leadership style that is oriented toward people, it can be concluded that it is tough to find a compromise between these two points of view. The "zero balance" idea is cited in the literature, according to which the manager is more task-oriented and less worker-oriented, and vice versa.

Depending on the complexity of the projects, it becomes relevant information that project managers in the role of leaders are responsible for the success of the projects they are working on. They use many skills, knowledge and abilities they possess and know in which situation to apply them.

In order for a project manager to be an effective leader, he/she must ensure a balance of his ethical, interpersonal and conceptual skills that can adequately help him analyze numerous situations. In addition, project managers should possess the next competencies: conflict management, negotiation, and trust building (Project Management Institute, 2013).

2.1.2. Engagement and motivation

Based on the studies that have been conducted, employees work better when they have challenging goals that they accept, but also if they have real feedback on their results and adequate rewards and benefits for their work (Seifert, 2014). Motivation is the amount of effort a person puts into a certain activity.

Since engagement and motivation are one of the key behavioral competencies of project

managers, it is important to put enough attention on them. Employee engagement is essential for any project that is implemented. Depending on the difficulty and complexity of the project, the engagement of the employees involved in that same project will also depend. When long-term and short-term goals are set, it is up to the employees to accept those goals, how much effort and motivation they will put in to meet the project's requirements depends on them. The engagement follows motivation, just as motivation follows employee engagement. Employee motivation can be directed in different ways, one of them is the benefits that employees receive. These benefits are most often in the form of monetary compensation or additional days off, which motivate employees to achieve the set goals and, in accordance with their realization, receive the mentioned benefits. In addition to these benefits, there are various other benefits such as receiving a company car from the company where the employee works, various vacations, free parking, vouchers, and many others.

2.1.3. Conflicts and crises

Conflicts represent situations in the organization that most often arise as a result of conflicting goals of employees. They arise due to different opinions, attitudes, values, and observations. In crises, it is necessary for the project manager to have and adopt templates that correspond to the conflicts that have arisen. How the project manager will respond to conflicts and reduce them to a minimum depends, first of all, on his efforts to eliminate these conflicts. The best situation is when the manager does not allow conflicts to arise, he tries to resolve all doubts of the employees, to find a compromise between the conflicting views and opinions of the employees in the organization. Only when the employees find a "common language" can it be said that the manager has managed to direct the employees to the right path. On the other hand, some conflicts and crises cannot be predicted and minimized, so in such situations, they cannot be prevented. Conflicts and problems can be foreseen. Possible sources of conflict are (Petrović, 2020):
- Conflicts due to different understanding of assigned tasks;
- Conflicts caused by costs;
- Conflicts between individual status groups in the organization;
- Different perception of time and priority of tasks;
- Personal conflicts;
- Various other conflicts.

Conflicts are often seen as negative influences on employees in the organization. Sometimes conflicts can be positive. Positive conflict is the conflict from which new and creative ideas are born from the conflicting parties. Sometimes solving conflicts and crises in the organization can improve employee work performance. It is recommended that leaders in the organization deliberately cause some unforeseen conflicts to force employees to think differently and go beyond the current business framework. When the conflict is ongoing, tension increases, all employees in the organization are activated, new ideas, prejudices or even new unplanned crises in the organization occur. Depending on whether intentionally caused conflicts contribute to the improvement of organizational culture, it is advisable to handle intentionally caused conflicts with caution.

In a situation where a conflict arises, the project manager should (Petrović, 2020):
- Be familiar with the company's operations;
- Investigates whether there has already been a similar conflict in the organization and if so, undertakes everything in his power to resolve that conflict;
- Has empathy for conflicting parties;
- Searches for potential solutions;
- After resolving the conflict, define a template to which such and similar conflicts will be resolved in the future, if there is a need for it.

3. Methodology

The research part of the article was carried out with the aim of having the respondents assessing their competencies in the field of project management, primarily behavioral competencies. Further, the research results can be used for future applicants in the field of

project management, as a competency assessment tool.

The research part of the article contains a questionnaire white questions adapted to IPMA individual competencies baseline and other international standards in the field of project management where the main focus is on behavioral competencies. The first part of the questionnaire consists of generic questions and demographic data, as gender, age, work status of the respondent, size of the company where the respondent works, familiarity with the field of project management, position in the project team, etc. The second part of the questionnaire contains situational questions adapted to practice areas, people and perspectives from the "Individual Competence Baseline" standard ICB4 (IPMA, 2015). The last segment of the questionnaire consists of behavioral situational questions from the field of project management where the respondent answers the questions using a defined scale of 1-disagree, 2-partially agree, 3-indifferent, 4-agree, 5-completely agree, to what extent does he/she possess the specified competence in a certain situation.

The survey was also conducted in order to observe the frequency in some answers to certain questions to provide an appropriate conclusion as to whether the competences represented by the respondents match the standards in the field of project management. Based on the research results analysis, it is also possible to determine whether there is a deficit in competences and what skills or abilities the respondent should work on to improve his performance and consequently achieve better results at work. The survey is not limited to the possession of knowledge, skills and abilities for the future job, but can also be used as a self-assessment of the respondent in the current job. The results of the survey could also be used in comparing the current level of competencies of employees with the level of competencies required by the organization where the same employee works. If some questions contain more than 90 percent of the same answers from the respondents, it can be concluded that the individuals on whom the research was conducted possess the specified competence and think the same or similarly as the individuals who answered the same situational question.

The survey was conducted on a sample of 303 respondents. Of this number, 67% of respondents are women, while 33% of respondents are men. Respondents mostly work in the public sector, 61% to be exact, while the other 31% work in the public sector, 3% work in the non-governmental sector, while 5% fall under other categories.

4. The research results on the behavioral competencies of the respondents

The next section of the questionnaire contains situational questions related to behavioral competencies. These situational questions help respondents to assess their competencies in specific work situations. These questions can also be used for the selection and/or recruitment of potential candidates for a particular position during interviews. The answers to the questions asked can significantly distinguish a potentially good candidate from a candidate who does not fit the requirements of an organization. Based on the answers of the respondents, certain conclusions can be drawn which can later be generalized and potential candidates can be evaluated based on the weighting and number of points won. The following graphs show the results of the survey that was conducted.

When asked whether the respondent is self-reflective and knows how to manage him/herself, 160 respondents gave themselves the highest rating, that is, 5 completely agree with the stated statement.

One of the most exciting questions in the survey was *"I often want to quit because of my colleagues."*Interestingly, as many as 26 respondents answered that they completely agree with this statement. The other 114 respondents do not agree at all with this competence, which examines the cause of dismissal at work.
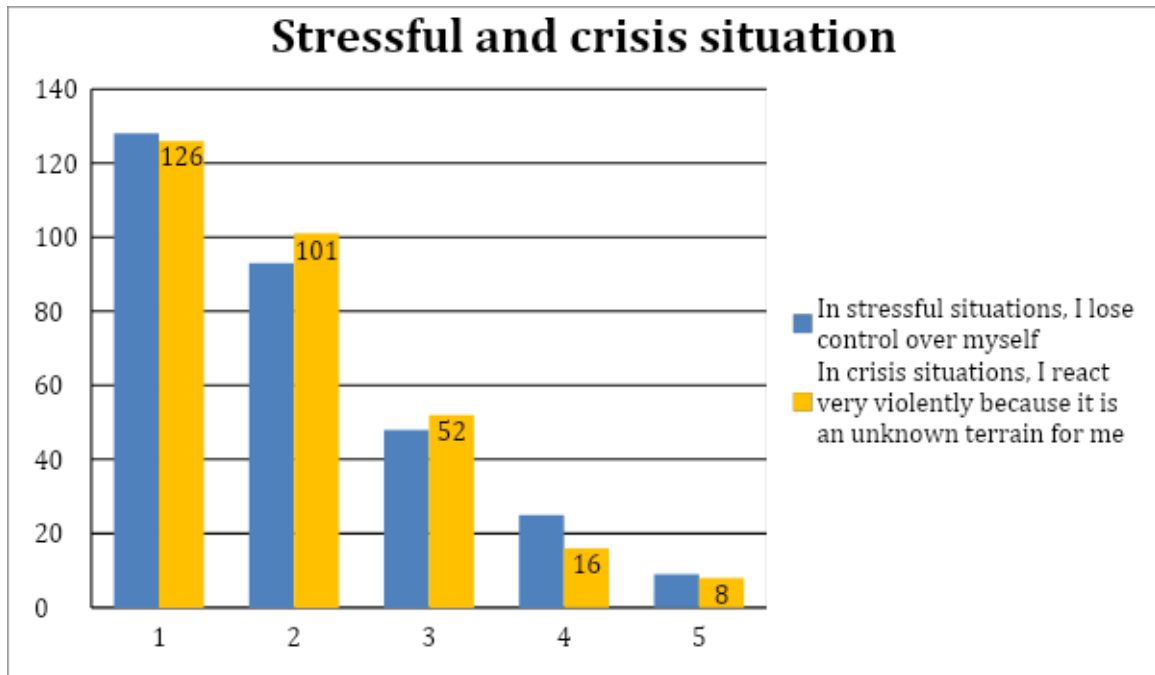
Figure 1. Competence results in "stress" and "crisis"

On figure 1, the competences "*Stress*" and "*Crisis situations*" are examined, the question is adapted as situational "In stressful situations I lose control over the room itself" and "In crisis situations I react very violently because it is an unknown terrain for me". The

respondents' opinions were divided, on the graph it can be seen that as many as 126 respondents completely disagree with these statements. This indicates that the respondents easily cope with stressful and crisis situations.
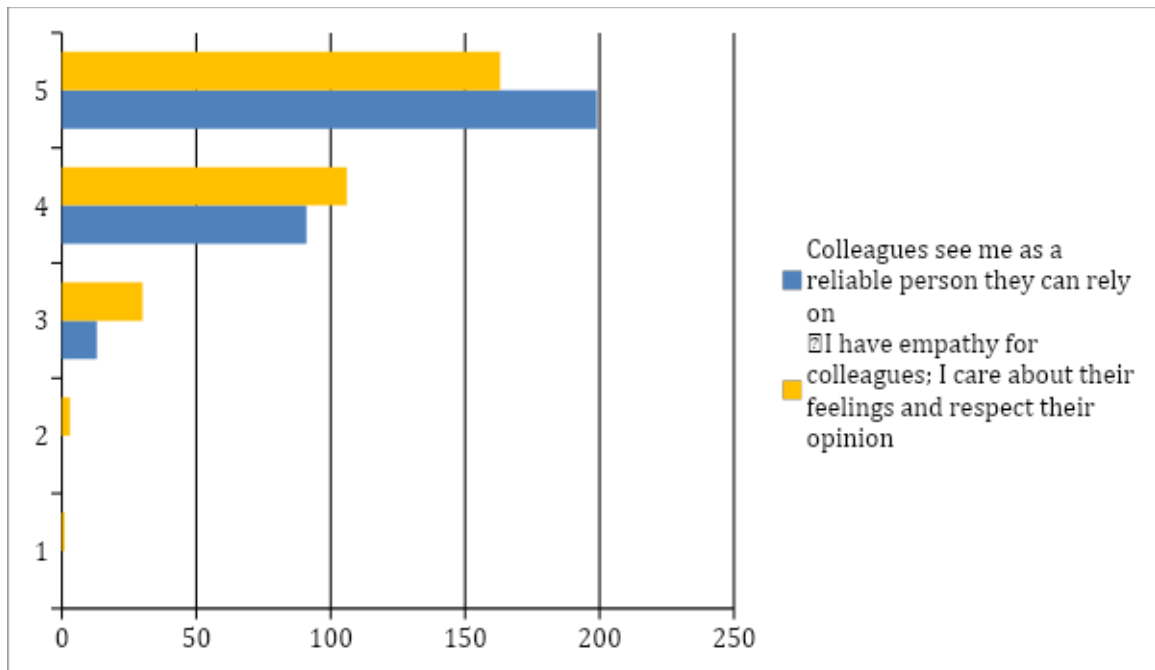

Figure 2. Competency results "reliability" and "empathy"

Figure 2 examines the competences "*Reliability*" and "*Empathy*", where the situational questions are adapted so that the question "My colleagues see me as a reliable

person on whom they can rely" was answered by a large number of respondents with the highest score, which is considered to be a self-assessment himself as a reliable person. The

same is true for the "Empathy" competency, where the situational question read "I have empathy for my colleagues." "I care about their feelings and respect their opinion" a large number of respondents, over 150 to be exact, answered with the highest rating, i.e. that they have empathy towards others.

The next figure 3 examines "When a crisis situation occurs on a project, I try to find the easiest way, to overcome the crisis as easily as possible" examines the competence "*resourcefulness*". The question "The results I achieved are more important to me, not the way I achieved them" examines the *competence-effective* work performance of employees. We see that the answers are asymmetric in relation to the highest grade, which means that the respondents are focused on effective work performance and easily overcome the crisis when it occurs in the project.
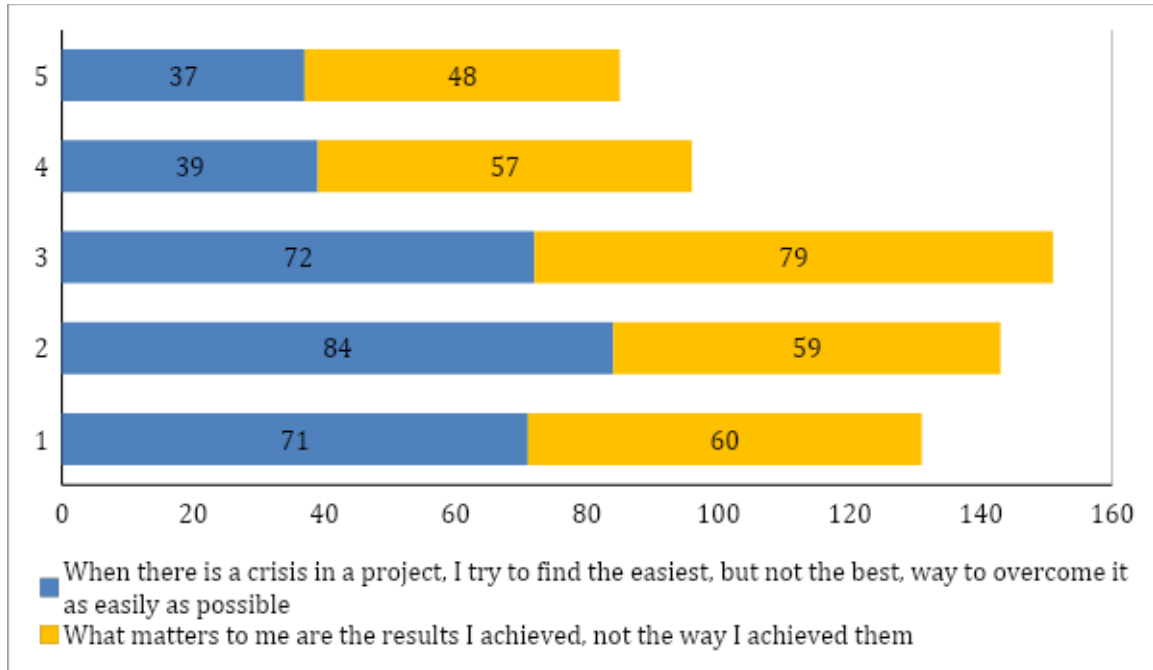

Figure3. Results of effective work performance among employees

3.1.   Conclusions and recommendations

As part of the research that was conducted and based on a sample of 303 respondents, the following conclusions were reached:

- 135 women are familiar with the field of project management, while 67 women are not familiar with this field;
- 66 men are familiar with the field of project management, while 35 men are not familiar with this field;
- Respondents are supporters of ethical behavior;
- There is a far greater number of respondents who are focused on efficiency at work, while the rest (17%) are focused on effectiveness;
- Almost half of the respondents have empathy towards their colleagues at work;

- A small percentage of respondents would quit their job because of the behavior of their colleagues;
- As many as 70 respondents gave an indifferent answer to the question of whether they present their creative ideas to external stakeholders as convincingly as possible in order for them to be accepted, that is, a score of 3;
- The competencies "self-control" and "creativity" are the most represented among respondents.

The field of project management should be brought closer to employees at the earliest stage of their careers in order to adequately familiarize themselves with this field, which they will often encounter. Employees should also be explained the main items of each

project, such as time, human resources, budget plan, etc. If the employee is educated as soon as possible in the field of project management, later he will not have problems with understanding this segment and will be able to upgrade his knowledge in this field.

The recommendation for organizations that invest in their employees is to thoroughly approach their adequate training, because long-term investments in employees' competencies will pay off. During the recruitment and selection of personnel, it is recommended to choose an employee who already shows the right competencies for the position he is applying for, so that he can devote himself to his work in the future, and not to further training on basic competencies. When organizations choose the right employee, it is necessary to find all the ways to "keep" him and train him to perform the job for which he is paid as efficiently and effectively as possible.

4. Conclusion

Behavioral project management competencies can play a major role in any organization. When it is adequately understood and then examined by employees, it can contribute to an increase in the work performance of employees, but also lead to some radical changes in the organization's operations, which will later, to a certain extent, lead to better operations. The aim of the article was to bring the concept of project management closer to employees through the theoretical aspect, and then the concept of competencies, specifically behavioral, and later to examine certain competencies of the respondents through a survey. The field of project management should be brought closer to employees at the earliest stage of their careers in order to adequately familiarize themselves with this field, which they will often encounter. Employees should also be explained the main items of each project, such as time, human resources, budget plan, etc. If the employee is educated as soon as possible in the field of project management, later he will not have problems with understanding this segment and

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References

IPMA. (2015). Individual Competence Baseline, version 4.0

Ivanković, V. (2019). Application of the competency framework in employee learning and development, Novi Sad, Serbia

Ivanković, V. (2019). The concept of competence, Center for human resources development and management, Belgrade, Serbia

Jovanović, P. (2015). Project management. Faculty of Project and Innovation, Belgrade

Mihailović, S., Vidojević, Z., Jovanović, Đ., Pavlović, V., Pavlović, D., Orlović, S., Marjanović, R., Čović, N., Cvetičanin, N., Ristić, I., Vuković, Đ., Kovačević, B., Đorđević, Lj., Vujadinović, D., Šram, Z., Marković, V., Biro, M., Đorđević, D., Veljanovski, R., Milivojević, S., Pobulić, S., & Nikolić, G. (2006). Five years of transition in Serbia, Belgrade, Serbia

Performance Management in Action: Current Trends and Practice Report. (2007). CIPD Books

Petrović, M. (2020). Conflict management, Entrepreneurial development center, Belgrade, Serbia

Project Management Institute. (2013). PMBOK Guide. Newtown Square: Project Management Institute Inc.

Seifert, Z. (2014). Management of human resources, Tehnical Faculty Mihajlo Pupin, Belgrade

Whiddett S., & Hollyforde, S. (2002). The Motivation Handbook

Yarbrough, Q. (2021). Project Definition: The Meaning of a Project, https://www.projectmanager.com/blog/project-definition.

Yukl, G. (2013). Leadership in Organizations, Pearson