

Key Competences of the Leader as a Basis for Designing the Corporate Educational Environment

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Abstract

In the present article, the authors propose the conceptual basis for the design of corporate educational environment of professional development and performance review technology. Within the framework of this concept, the educational process is based on the principles of "learning through game" and visual simulation. The environment provides variability and continuity of educational programs in accordance with the job features of trainees. Profile competence card, which includes three profiles: professional knowledge profile; professional abilities' and skills' profile; and personal qualities' profile, is prescribed to each position in the organization. In order to determine the individual indicators for each profile and create job profile, the authors conducted a sociological survey of middle-ranking managers and staff members of the organization. Based on the results of the conducted survey, the authors offer visuagraphic profiles of the manager's position consisting of the professional skills' profile and personal qualities' profile.

Keywords: Competence; Visuagraphic simulation; Job profile; Job card; Corporate educational environment.



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1. Introduction

More than 2,000 business games are currently used in the contemporary world of vocational education and training. They differ in the scale of the simulated objects (shop, factory, or the whole industry), as well as functional profile (management, market, production, etc.).

A great contribution to the development of game technologies in the system of occupational training was made by domestic scientists, namely, [Verbitsky \(1991\)](#), [Dudchenko \(1987\)](#), [Dudchenko \(1989\)](#), [Krasovsky \(1989\)](#), [Platov \(1991\)](#), and [Khrutsky \(1991\)](#). As for foreign scientists, a significant contribution to the development of game technologies have made the works of [Malcolm \(1950\)](#), [Tough \(1971\)](#), [Cofer \(2006\)](#), and [Cross \(2007\)](#).

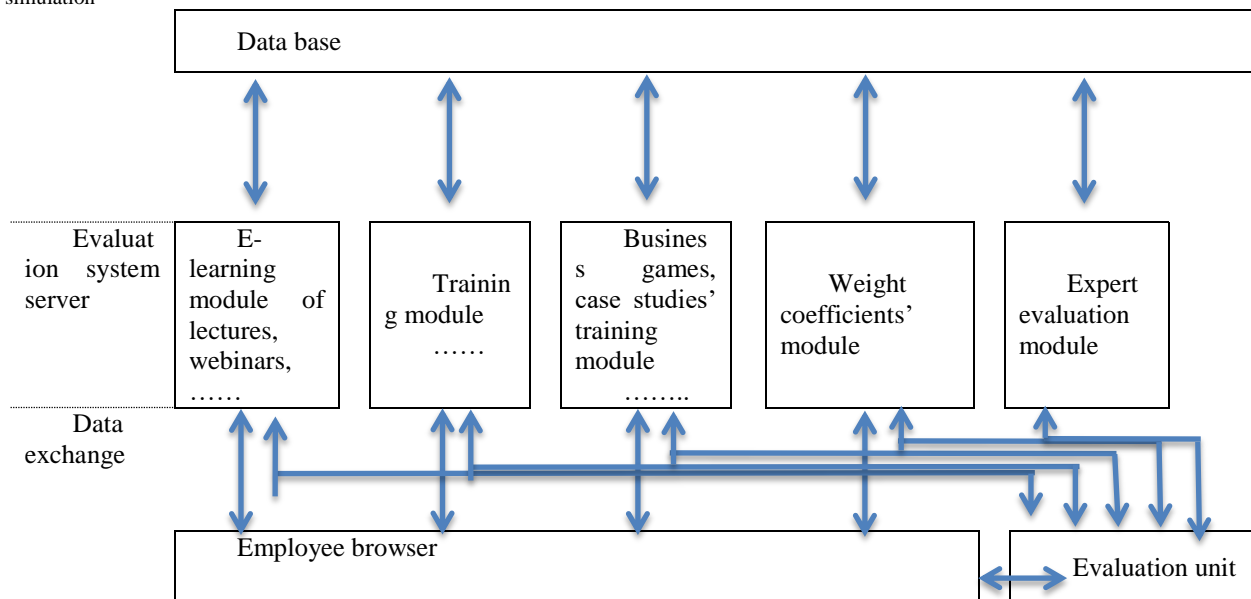
A new round in the development of domestic role-playing simulation games occurred in the 80-s of the XXth century with the implementation of personal computers into the educational process. Currently, according to experts, in the Russian system of training, game technologies are concentrated so far only in the field of improving economic literacy. Here it is worth mentioning games such as: "Cash flow", "Rat race", "Monopoly", and "Financial carousel". There are also some technologies to improve the literacy of the population in the field of energy saving implemented in the Russian online games "My energy" and "Smart city" ([Buley et al., 2016](#)); ([Krasovsky et al., 2018](#)).

The main advantage of game techniques is that the proposed scenarios are not a product of any abstract generalization, but an objective reality ([Zhukov, 2015](#)). Simulating actual communication dependences that arise in the organizational environment and receiving output data on each scenario, trainees, in the course of free creative analysis, search for solutions to the problem by comparing different scenarios and actions according to a strictly defined algorithm, create new generalized knowledge, or acquire important professional competences ([Soroko et al., 2018b](#)).

Despite the undeniable advantage of simulation game techniques in comparison with other forms of personnel training, the leaders of Russian companies yet do not pay enough attention to the use of e-learning methods and technologies. The problems are primarily related to the complexity of the description of situations and weakness of their simulating tools. There are also other reasons that are associated with the lack of administrative regulations in the organizations of the business sector, the lack of professional standards and common approaches to personnel

evaluation. In this regard, the authors developed the concept of corporate educational environment of professional development and personnel evaluation based on the use of gaming simulation (Figure 1).

Figure 1. Model of corporate educational environment of personnel professional development and evaluation based on the application of game simulation



The educational environment is based on the following basic principles (Soroko *et al.*, 2018a);

- interest, i.e. the contents and presentation form, methodology, as well as staff behavior, etc. should motivate the trainees to cognitive activity;
- innovativeness: the very essence of the environment is innovative that should be supported by working methods with trainees, content and quality of service provided;
- accessibility and democratic character, i.e. the possibility and comfortable stay in the environment, the use of its educational and developmental components;
- quality, i.e. all elements of the environment must be executed qualitatively, equipped with real scenarios of professional activity, provided with the necessary information materials and manuals;
- scientific character, i.e. all elements should be aimed at the development of specific competences, knowledge or skills of trainees, obtaining a specific result.

The educational process is based on the principles of "learning through the game" (Edutainment) and visual simulation. The environment provides variability and continuity of educational programs in accordance with the job features of trainees.

Mastering programs of basic electronic courses is recorded in the individual training program. Each module of e-courses contains a set of cases, scenarios, business situations, simulators, and final variative tests.

Each position in the organization is provided by prescribed personal profile competence card, which includes three profiles:

- professional knowledge profile (what the employee holding a certain position should know);
- professional skills' and abilities' profile (what should employee be able to do and what skills to possess);
- personal qualities' profile (what personal qualities should have an employee occupying certain position).

During the certification of personnel, staff members are tested for each profile to determine the level of compliance of employee with the profile competence card. Then the estimates for each profile are transferred to the visuagrophic models.

In addition, the organization develops a database of educational materials. The mastering of these materials will increase the level of professional competence for each profile.

For the professional knowledge profile, organization develops a knowledge base, which includes a course of electronic lectures, video materials, webinars, etc.

For the professional skills' profile, a database of learning cases, scenarios, business, or simulation games is developed.

The profile of personal qualities is represented by a set of trainings, the mastering of which contributes to the acquisition of the necessary business qualities.

In general, the development of test materials and profile competence card provides an opportunity to assess the employee's potential to promote him and reduce the risk of nomination (admission) of incompetent staff members, as well as to reduce training costs; support staff members' sense of justice, and increase work motivation (Pozdnyakova, 2010). Moreover, as already noted, this tool can also be used by staff for self-assessment. Finally, each profile, which contains parameters for assessing the employee's effectiveness, allows initially setting the right tasks for the beginner and training him for work after the trial period, immediately adapting the employee to the evaluation system of personnel accepted for employment.

In organizational training, it is very important to clearly represent the situation "before" and "after" the use of express training methods (Ryabova, 2017), especially when the training object is a newly hired employee or employee applying for promotion.

At first, the initial measurement of the employee's professional competences is conducted for each profile. Next, the actual profile of the employee's competences is compared with the professional competences' profile corresponding to the position, to assess the differences.

As noted earlier, one of the principles of designing a testing system is accessibility, i.e. the testing system should be freely available to any employee. This principle allows the employees without waiting for the certification period independently check and evaluate their professional competence level. After testing, depending on the degree of coincidence of employee's profiles with the profile competence card corresponding to the position, the system automatically places the employee in reserve for the desired position, or assigns a training program. Based on the generated profile competence card, it is clearly seen in which direction a particular employee should develop.

An objective analysis of staff competences is necessary at various stages of their professional cycle, namely, when hiring, determining the need for training, job appointment, and updating of competences (Kirillov *et al.*, 2018)

In this regard, there is a need to develop both single indicators that make up the content of the job card profile, and the calculation of the weight coefficients of the significance of each of the competence profile in the comprehensive assessment of the employee.

2. Methods

The basic research method was a sociological survey of middle-ranking managers. The age and gender composition of the respondents was represented by the following proportions: 8 women, 22 men aged 35 to 50 years. Experience in a managerial position was not less than 5 years. Research tools consisted of several question pools that were aimed at determining the skills, abilities, and personal qualities that an effective manager should possess. The professional knowledge profile in this work was not developed, because the cognitive component requires a narrow specialization and depends on the specifics of the industry and organization. At the second stage, through the focus group, the authors attempted to adjust the list of indicators of the leader's job card through the survey of ordinary staff members of the organization. The purpose of the study was to define those skills, abilities and personal qualities that an effective manager should possess.

The first profile of competences and, accordingly, their criteria, are competences that characterize the capabilities of staff members, their potential, expressed in the level of mastering certain skills and abilities.

The second profile of competences and criteria characterizes the achievements of staff members at the time of evaluation of their activities. Achievements, as results of implementation of their own opportunities and potential when serving in the job, reflect social and personal qualities of the employees, degree of implementation of their opportunities and the potential.

3. Results

The analysis of studies devoted to management and vocational education conducted in relation to professional competences, has shown that most often are mentioned the research papers by Agafonova (2014), Andreeva and Danilov (2014), Zimnyaya (2004), Kaptilovich (2013), Kudryavtseva (2011).

Each position is characterized by a unique list of competences reflecting corresponding requirements and determining its effectiveness. Based on the analysis of scientific sources, the authors of the article compiled a list of key competences of the category entitled "leader" (Tables 1, 2).

Table-1. List of competences and professional skills of leader

№	Name of competence	Competence characteristics
	Personal responsibility	Ability to take responsibility for own actions
	External impact resistance	Ability to quickly recover after unpleasant situations
	Written communication	Ability to write clearly, effectively and professionally
	Interpersonal communication skills	Effective communication, good interpersonal relations, and mutual understanding with all co-workers
	Skills to convince	Persuasion of others to change an opinion, position or behavior
	Communication skills	Effective communication with teams
	Teamwork skill	Effective and productive team work
	Achievement of goals	Ability to identify and prioritize actions leading to the goal achievement
	Negotiation skills	Ability to facilitate the achievement of agreements between two or more parties
	Ability to solve problems	Anticipation, analysis, diagnosis and problem solving
	Self-organization	Self-control and ability to manage time and prioritize
	Conflict resolution	Constructive effective response to conflicts and their resolution
	Decision making skills	Utilization of effective processes for decision-making
	Planning and organization	Utilization of logical, systematic, and organized procedures to achieve goals
	Staff development	Promotion and support of professional growth of staff
	Ability to understand and appreciate others	The ability to interpret and understand the feelings and attitudes of others
	Flexibility	Quick adaptation to changes
	Task execution management	Ability to create and encourage professional motivation of employees

Table-2. List of professional competences of social and personal qualities of leader

No	Name of competence	Competence characteristics
	Focus on people	The position requires a constructive approach to people. Most of the time for this position is devoted to listening and understanding variety of people, successfully working with them to achieve mutually beneficial results.
	Focus on result	In this position, one need to be persistent and bring the task to its conclusion.
	Focus on development	Interest in the growth of the company, not solely, in a personal career. If the leader is highly skilled, his goal is to leave something after himself. Personal power does not entertain him; he does not want to clear out his achievements after relocation or a promotion.
	Responsibility and discipline	Work requires both personal responsibility and discipline, and the ability to support the rules of internal labor regulations and corporate solidarity.
	Communicability	The position assumes that the employee has absolute skill set for effective verbal and nonverbal communication and interaction, including situational adaptability.
	Optimism and confidence	Work requires optimism and self-confidence. It is required to apply various abilities and skills for task performance.
	Initiative	The position assumes the ability to encourage the initiative of employees and encourage staff to express creative ideas, offer an advice or practical approach to the issue.
	Independence	Work requires independence in making specific decisions aimed at timely and high-quality task implementation.
	Honesty and ethical behavior	This position requires fair attitude toward others, regardless of personal perceptions or believes
	Leadership	Moral and intellectual ability to visualize the future desired state of the organization and assemble a team that can achieve this future.
	Resistance to stress	The ability to quickly change behavior, adapt to changing environment under the influence of stress factors. In other words, to be stress resistant.
	Sense of humor	Personal and psychological characteristics of the leader, who manifests himself in the ability to notice the contradictions and characteristics of the environment, people and events from a humorous point of view. The ability to see the positive side, where others think that everything is tragic and very difficult.

The list of key job competences to determine their importance was proposed to middle-ranking managers and staff members of the organization. Based on the answers, the authors have built a hierarchical order of competences, which reflects the profile of skills and abilities important for the position of "leader" (Figure 3), as well as the profile of professional competences of social and personal qualities for a particular position (Figure 2).

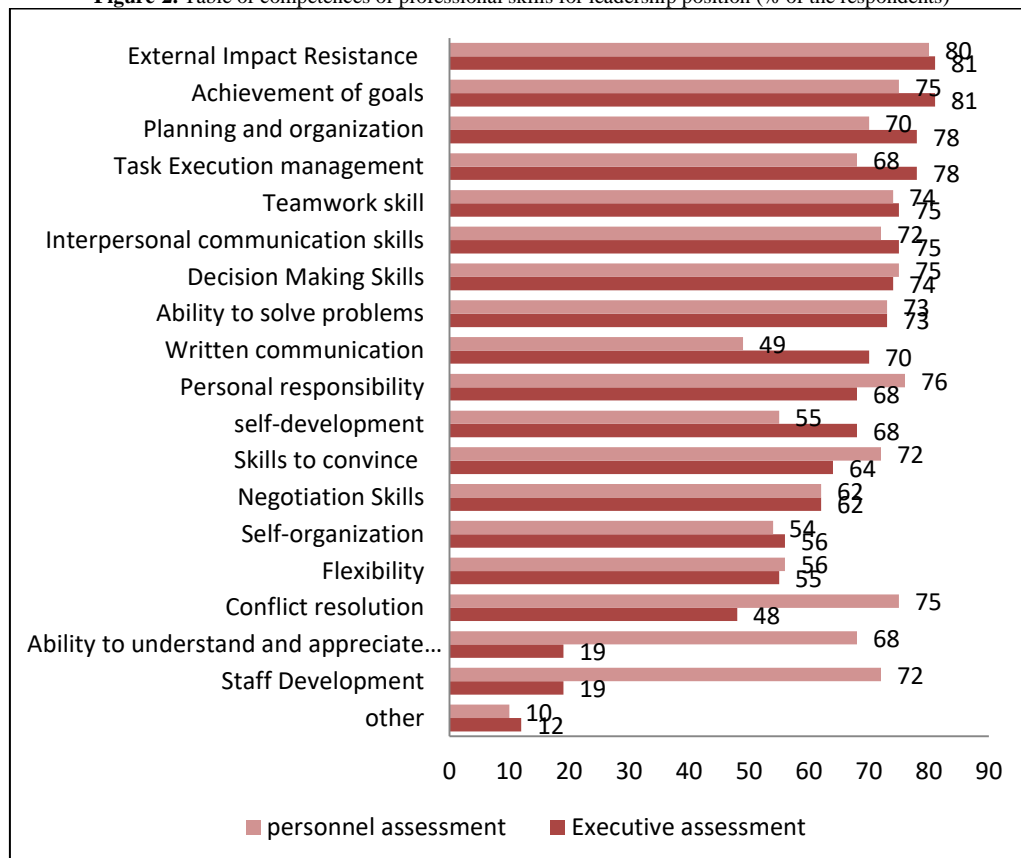
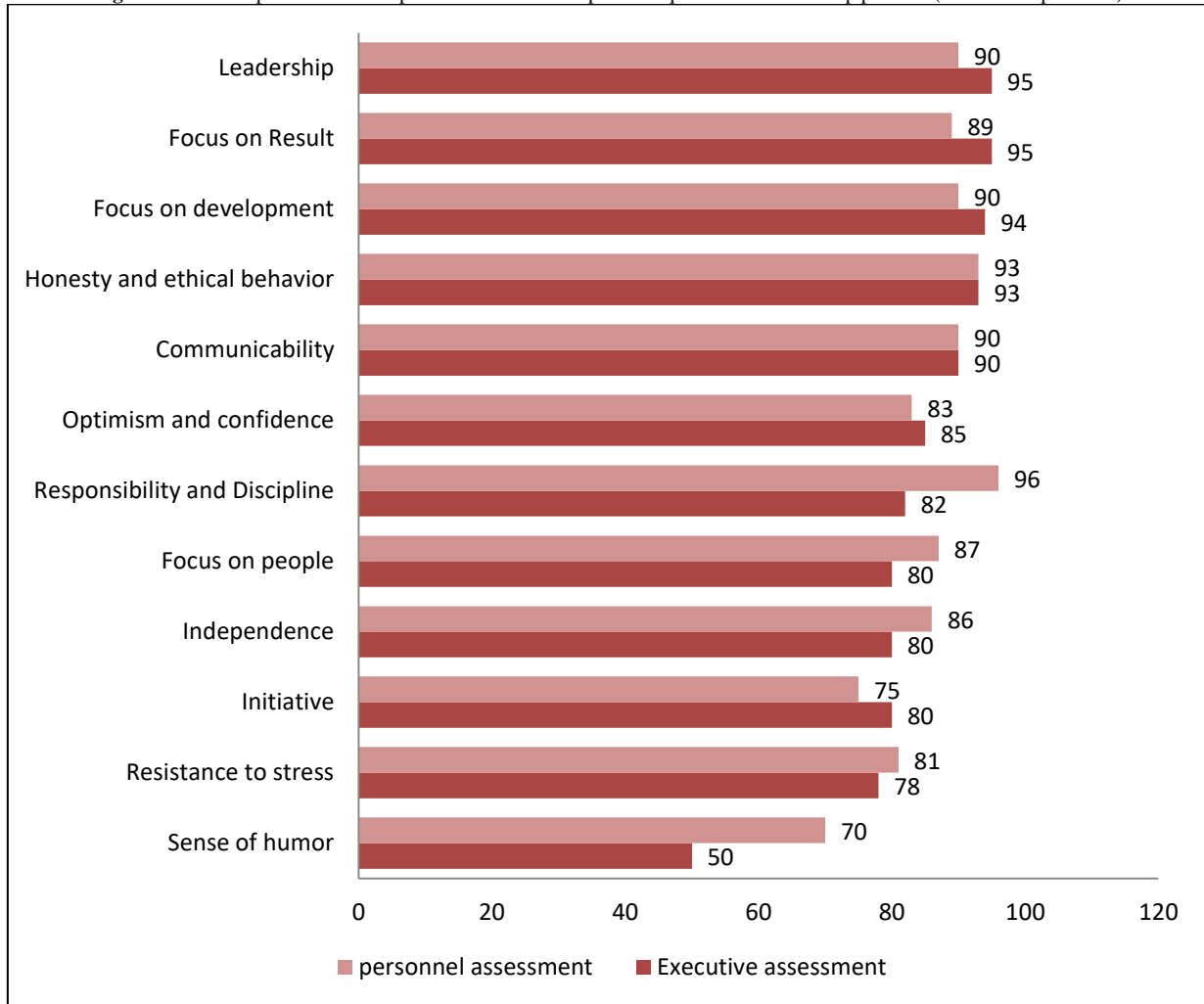
Figure-2. Table of competences of professional skills for leadership position (% of the respondents)

Figure-3. Table of professional competences of social and personal qualities for leadership position (% of the respondents)

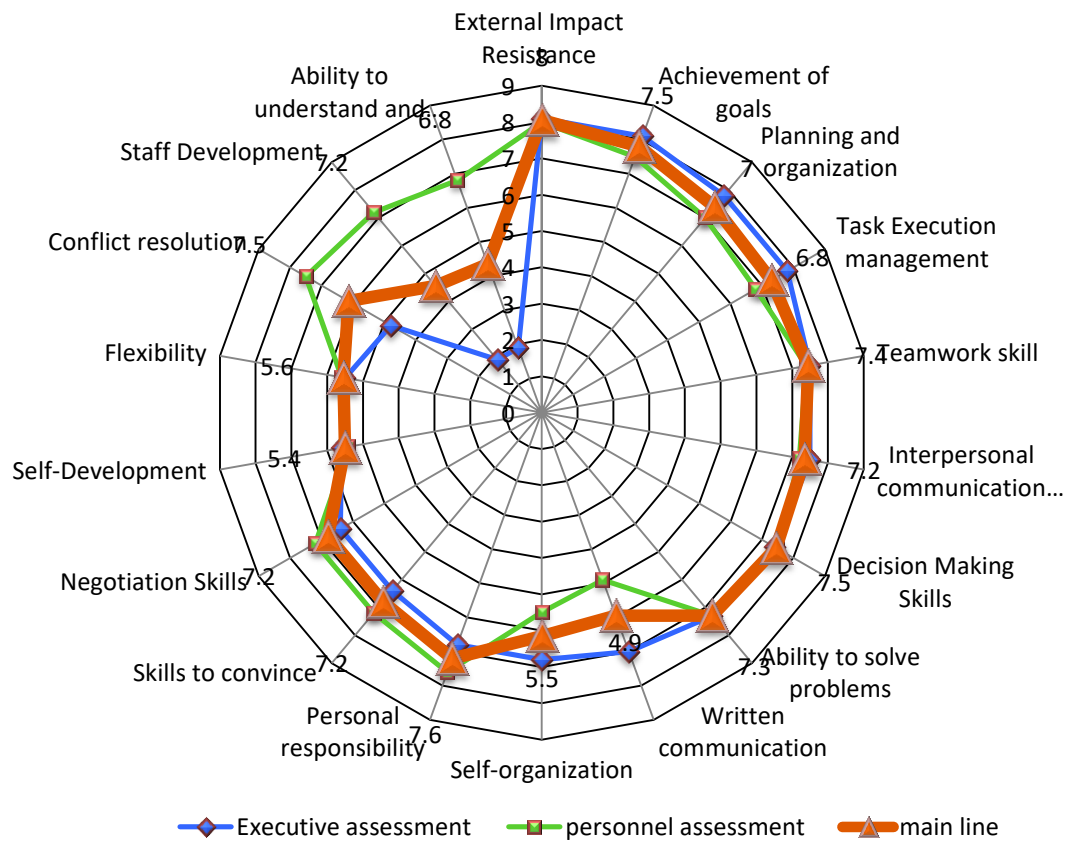
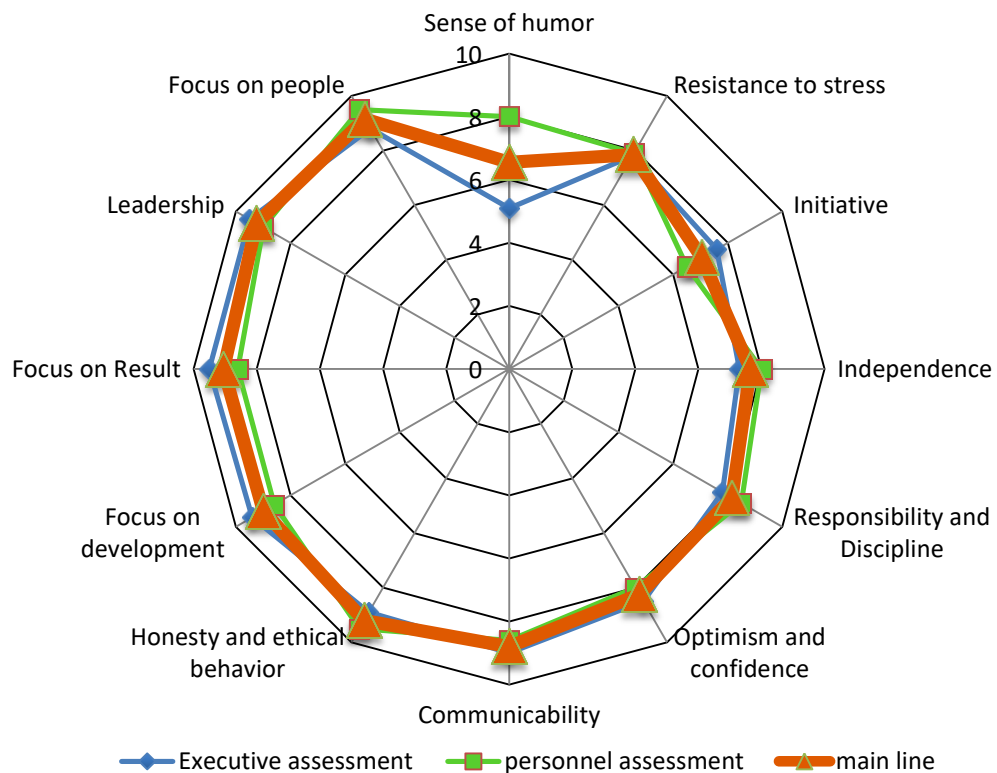
At the second stage of the survey, respondents were asked to determine the significance of individual indicators on a 10-point scale. The following reference values were used to determine the significance of competences for the particular position:

- 0 – 4.9 – irrelevant to a given position;
- 5.0 – 6.9 – secondary significance to a given position;
- 7.0 – 8.9 – significant to a given position;
- 9.0 – 10.0 – extremely significant to a given position.

To build visualized models of the professional skills' (abilities') profile and professional competences of social and personal qualities, it is necessary to average the significance of competences noted by leaders and staff members of the organization.

$$PC = (PC_{\text{assessed by leader}} + PC_{\text{assessed by staff}}) / 2$$

Based on the obtained results, the authors have visualized the profile models of professional skills (abilities) of an effective leader (Figure 4) as well as professional competences of leader's social and personal qualities (Figure 5).

Figure-4. The visual model of professional skills (abilities) for the managerial position**Figure 5.** The visual model of professional competences of social and personal qualities for the managerial position

Assessment of the formed competences of the organization's employee becomes particularly relevant in the event of certification and job appointment.

4. Conclusion

The study has shown that Russian leaders are more focused on the following competences.

1. The group of professional skills (abilities) of "leader" (Figure 4) ensuring personal effectiveness (*Written communication, Problem-solving skills, Decision making skills, Interpersonal skills, Teamwork skills*), and organizational effectiveness (*Performance management, Planning and organization, Achievement of goals, and Resilience to external impact*).

At the same time, one may pay attention to close meanings given by leaders and staff members to a number of competences. For example, leaders and staff members showed equal interest in mastering competences such as: *Resilience to external impact* (8.1 versus 8.0); *Achieving goals* (8.1 and 7.5); *Planning and organization* (7.8 and 7.0); *Ability to work in a team* (7.5 and 7.4); *Decision-making skills* (7.4 and 7.5); and *Ability to solve problems* (7.3 in both groups).

While talking about differences in competences assessed with a difference of more than one point, their analysis allows highlighting interesting dissidences: according to leaders, the competences such as *Performance management* (7.8 versus 6.8); *Written competence* (7.0 and 4.9); and *Self-development* (6.8 and 5.5), as is seen, are more significant.

At that, unlike leaders, staff members consider the following competences to be more significant for leaders: *Personal responsibility* (7.6 versus 6.8); *Persuasion skills* (7.2 and 6.4); and *Negotiation skills* (7.2 and 6.4). Significant differences are observed in competences such as: *Conflict resolution* (7.5 and 4.8); *Development of subordinates* (7.2 and 1.9); and *Ability to understand and appreciate others* (6.8 and 1.9).

2. 2. As concerns the group of professional competences of social and personal qualities with respect to position of "leader", the following conclusions may be drawn (Figure 5).

The analysis of the survey results shows that Russian leaders are more focused on competences ensuring personal effectiveness (*Leadership, Communication skills, Optimism and confidence, Honesty and ethical behavior*) and the effectiveness of the organization (*Result-oriented, and Development-oriented attitude*).

In this group, the following competences have received close assessments: *Leadership* (9.5 and 9.2); *Honesty and ethical behavior* (8.5 in both groups); *Resistance to stress* (7.8 and 7.9); *Optimism and confidence* (8.5 and 8.0). Significant differences are observed in competences such as: *Result-oriented attitude* (9.5 and 8.5); *Development-oriented attitude* (9.4 and 8.4); and *Sociability* (9.0 and 8.2). According to leaders, it is these competences that an effective leader should master. While staff members believe that an effective manager should demonstrate to a greater extent competences such as: *Focus on people* (9.5 versus 8.5); *Responsibility and Discipline* (8.5 and 7.5); and *Sense of humor* (7.8 and 4.0).

As is obvious from the study, leaders of organizations are more focused on mastering the competences which contribute to the personal effectiveness of the leader as well as the effectiveness of the organization, as interrelated indicators. Unlike leaders, staff members are focused on the competences of leaders directly related to the development of the workforce and the ability to maintain a favorable socio-psychological climate in the team.

In conclusion, it should be noted that talking about differences in opinions between leaders and staff members, given the size of the sample, the statistical significance of differences both between competence categories and between groups of respondents is rather relative. Therefore, more detailed research is needed to refine the obtained data.

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