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TEAMWORK AS A COMPONENT OF SOCIAL COMPETENCE OF YOUNG SCIENTISTS

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Abstract. The research satisfies the current world trends in future jobs, where team work is considered as one of the significant soft skills till 2030. The *purpose* of the paper is to identify the key team roles, which have leading impact on social competence of young scientists in Ukraine. The novelty of the research is represented by the created theoretical model of social competence and its connection with team work. The proposed model includes such blocks as: approaches to definition, structural elements in combination with evaluation criteria, types of an individual's social competence, functions and levels of social competence as well as approaches to social competence research. The *object* of the scientific research is the process of using team work tools in social competence management of young scientists' teams. The research methodology includes such methods: comparative analysis, critical analysis, descriptive analysis, factor analysis, and cluster analysis. The research is based on the results of the special direction of the mass sociological survey of young scientists in Ukraine. The limitations of the research are that the period of gathering data covers 2020 year before the war in Ukraine. The Belbin's approach to team roles was taken for researching the current state of team work as an important part of social competence of young scientists in Ukraine. The obtained *results* confirmed quite equal distribution of managers' types in the teams of young scientists. The most important team roles are Implementer and Team-worker that corresponds to the young scientists' basic functions. But, such team roles as Monitor-evaluator, Resource Investigator and Plant require better development. The *practical value* of the research for the young scientists' community is in the use of the levels of team-role orientations in building the young scientists project teams and developing their social competence, which gives the opportunity to improve the education and training of young scientists. The possible directions of the research development are studying of the other approaches to team management, stress management and emotional well-being of young scientists. The possible ways of developing team work in particular and social competence in general in the process of education and training of young scientists are the implementation of special modules of soft skills development.

Key words: team work, social competence, young scientists, team roles.

JEL Classification: I21, J24

1. Introduction

Young scientists as an important group of science in any country is transforming today under the influence of general global trends in the development of society.

The social competence of young scientists trained by educational institutions is now more important than ever for both successful professional and personal development. The importance of social competence is presented in many modern national and international documents and reports, such as: "Proposal for a Council of Europe Recommendation on Key Competences for Lifelong Learning, 2018/0008 (NLE)" (2018); The World Economic Forum Report "The Future of Jobs" (2018); Laws of Ukraine "On Higher Education" (Verkhovna Rada of Ukraine, 2014), "On Innovation Activity" (Verkhovna Rada of Ukraine, 2002); project "Realization of the potential of young scientists in the context of integration of science, education, business" (Shkoda et al., 2020), etc.

Young scientists are at a sensitive age for the formation of social competence. In addition, the contextual nature of cooperation and postgraduate studies or work as a teacher in a higher education institution provides an opportunity to form social

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competence that will remain relevant in the future life and activities of the individual.

According to a current LinkedIn survey, for example, soft skills as part of social competence are growing in importance for business success for 80% of respondents, with 89% noting the lack of soft skills among the failed hires in their organization, and 92% saying that soft skills are as important or even more important than hard skills (WEF 2019). The term 'soft skills' hardly does justice to the complex combination of abilities it describes: empathy, emotional intelligence, creativity, teamwork, collaboration and communication, to name but a few.

This coincides with one of the observations of the World Economic Forum's Future of Jobs Report (2018), which refers to the importance of "non-cognitive soft skills (that enable) people to use their unique human abilities."

The challenge for employers, especially in the field of young science, is that soft skills as part of social competence can be difficult to identify in the recruitment process. Unstructured assessment of soft skills prior to hiring is a significant problem: 68% of respondents told LinkedIn (WEF 2019) that the main way they are assessed is by identifying social cues during the interview.

Research question: Today, the world economy is entering a new era of global economic relations, which largely requires workers with new competencies in both EU and non-EU countries, including Ukraine. At the same time, the EU is promoting the European Commission's Proposal for a Council of Europe Recommendation on Key Competences for Lifelong Learning, 2018/0008 (NLE), where social competence is declared as one of the key competences to improve the European Framework of Key Competences.

In this study, it is necessary to consistently address the following research question: "How does teamwork affect the social competence of young scientists in Ukraine? What are the ways to develop social competence of young scientists in the educational process in Ukraine?"

2. Theoretical basis

Social competence is usually considered as social adaptation, performance of social roles, balance between social requirements and personality traits, social behavior, social reality, mastering social experience as a general, collective, integrative concept that indicates the level of socialization of a person, in particular, professional, and has characteristics inherent in wide spheres of human life (Zarubinska, 2010), including social responsibility.

In the scientific literature there are four general approaches to the operational definition of social competence (Rose-Krasnor, 1997): 1) specific skills; 2) sociometric status; 3) relationships; and 4) functional outcomes. When using the specific skills approach to social competence, the following attributes are distinguished: social, cognitive, emotional, perceptual-motor and self-systemic. The status approach to social competence is a sociometric assessment that reflects the combined judgment of peers, which is a generalization of the behavioral and affective components of social competence. This approach also demonstrates good temporal stability. But, Rose-Krasnor L. (1997) does not prove that popularity among colleagues will predict further success. In this context, the author suggests that the popularity of a young scientist in the group does not prove his/her further professional success.

The transactional nature of social competence is considered within the relationship-based approach to social competence. It is manifested in both friendship and commitment indices of social competence. According to this approach, social competence depends on the relationships of young scientists, which in turn depend on the skills of both relationship partners. These relationships can be horizontal or vertical (Hartup, 1989). In the context of the education and training of young scientists, horizontal relationships can be considered as relationships with other young scientists, where all the relationship partners have approximately the same level of required skills. Instead, vertical relationships can be considered as relationships with a teacher or any other person who has a higher level of expertise.

The specificity of the functional approach lies in the definition of social goals and objectives. Researchers (McFall, 1982; Rose-Krasnor, 1997; White, 1979) believe that the functional approach also focuses on the results of social behaviour, as well as on the processes that lead to these results.

Ma H. K. (2012) considers three important aspects of social competence, which are related to (1) the ability to build positive and healthy interpersonal relationships and resolve interpersonal conflicts, (2) the development of a clear self-identity in general and a group or collective identity (e.g., professional identity) in particular, and (3) the orientation to be a responsible citizen in one's society and a concerned citizen in the world.

A. Ilie (2010) believes that social competence should be seen as a complex system of social cognition, social motives, social abilities, traditions and skills, and social experiences. It includes the ability to act in a socially acceptable way (sincerity, ability to play roles), cooperation skills (respect for others, sensitivity, freedom from prejudice), establishing contact (creating, developing and breaking up teams, expressing feelings and opinions),

persuasiveness (impression that makes on others, charisma).

Social competence is defined by D. Euler & A. Bauer-Klebl (2008) as the ability to interact purposefully with others on professional, social or personal topics in specific types of situations. B. Greimel-Fuhrmann (2013), who agrees with the previous definition, emphasizes that social competence enables competent communication with other people.

Acmeological research adds to the structure of social competence, in addition to knowledge, skills and abilities, also a spiritual, personal, motivational and value component, which involves social responsibility and the desire for self-realization of the individual in the profession and society as a whole (Zinkivskyj, Mirskykh, 2008). However, in the author's opinion, social responsibility and professional responsibility fit into the functional approach to the interpretation of social competence, as their presence contributes to the achievement of social goals and solving social problems.

According to I. B. Zarubinska (2010), the personal component of social competence involves the following abilities and characteristics of the personality: empathy, tolerance, general analytical abilities, internal locus of control, positive self-concept and, accordingly, adequate self-esteem, self-respect, ability to emotional self-regulation. According to the author, these components of the personal component of social competence (Zarubinska, 2010) largely correlate with the components of social competence within the framework of Rose-Krasnor's (1997) specific skills approach.

Having analyzed the works of Varetska O. V. (2014) and Zarubinska I. B. (2010), it should be noted that the activity component of social competence includes cognitive, value-motivational, communicative, operational-technological, evaluative, reflective aspects. Each of these components of the activity component of social competence has its own elements, which can also be considered as evaluation criteria.

There are several criteria for distinguishing the types of social competence of a person in the literature. The most optimal, according to the author, is the classification with the participation of consciousness (Trukhin, 2005): unconscious competence, conscious competence, conscious incompetence and unconscious incompetence. That is, a person may or may not be aware of his or her social competence or incompetence.

In the context of social competence, the difference between these two classifications of its types is that, for example, a person who realizes his/her social competence can equally perform both productive (innovative, unusual) tasks and reproductive (repetitive, technical) tasks. Whereas a person who does not realize his social competence will more often perform reproductive tasks. The one who is not aware of his social incompetence will tend to overestimate his efforts in performing the tasks, and the one who is aware will tend to underestimate them.

Based on the analysis of theoretical sources, the authors propose the following model of social competence (Figure 1).

According to the definition of the World Economic Forum (WEF, 2019), social competence includes such components as leadership, which belongs to the personal component of the proposed model (Figure 1), as well as teamwork, which belongs to its activity component. That is why the authors drew attention to the relationship between teamwork and social competence.

Erpenbeck and Rosenstiel (2003) consider social competence as one of the four types of competences and define it as a person's inclination to communicate and cooperate (understanding others, developing others, service orientation, using diversity, political awareness, influence, communication, negotiation and disagreement resolution, leadership, catalyst for change, networking, cooperation and collaboration, teamwork). Emotional intelligence as a component of social competence was considered as a basis for the development of organizational leadership during the Covid period in educational institutions (Semenets-Orlova et al., 2021) and can be applied to the target group of young scientists. Particular attention was paid to educational changes (Semenets-Orlova, 2017) as a driver of social competence transformation. The potential of young scientists is considered by researchers (Gernego, Shkoda, Savych, 2021) as an important element of strategic human capital management.

The social competence of young scientists is an integrative qualitative category, a personal formation that combines a value understanding of social reality, specific personal qualities, abilities, social knowledge, skills, abilities as a guide to action, subjective readiness to apply social experience in the main spheres of human activity, the ability to make socially promising transformational influences in the scientific field, to analyze their consequences (Tyulpa, 2020).

There is also an approach that considers the social competence of young scientists within the educational and qualification framework. In particular, Monnier M., Tschöpe T., Srbeny C. et al. (2016) in their study, based on the educational qualification framework and the competencies specified in it, define social competence as a dynamic cognitive concept, that is, something that can be studied. They believe that modeling and measuring social competence is possible only if the focus is on basic "social and emotional-cognitive dispositions" rather

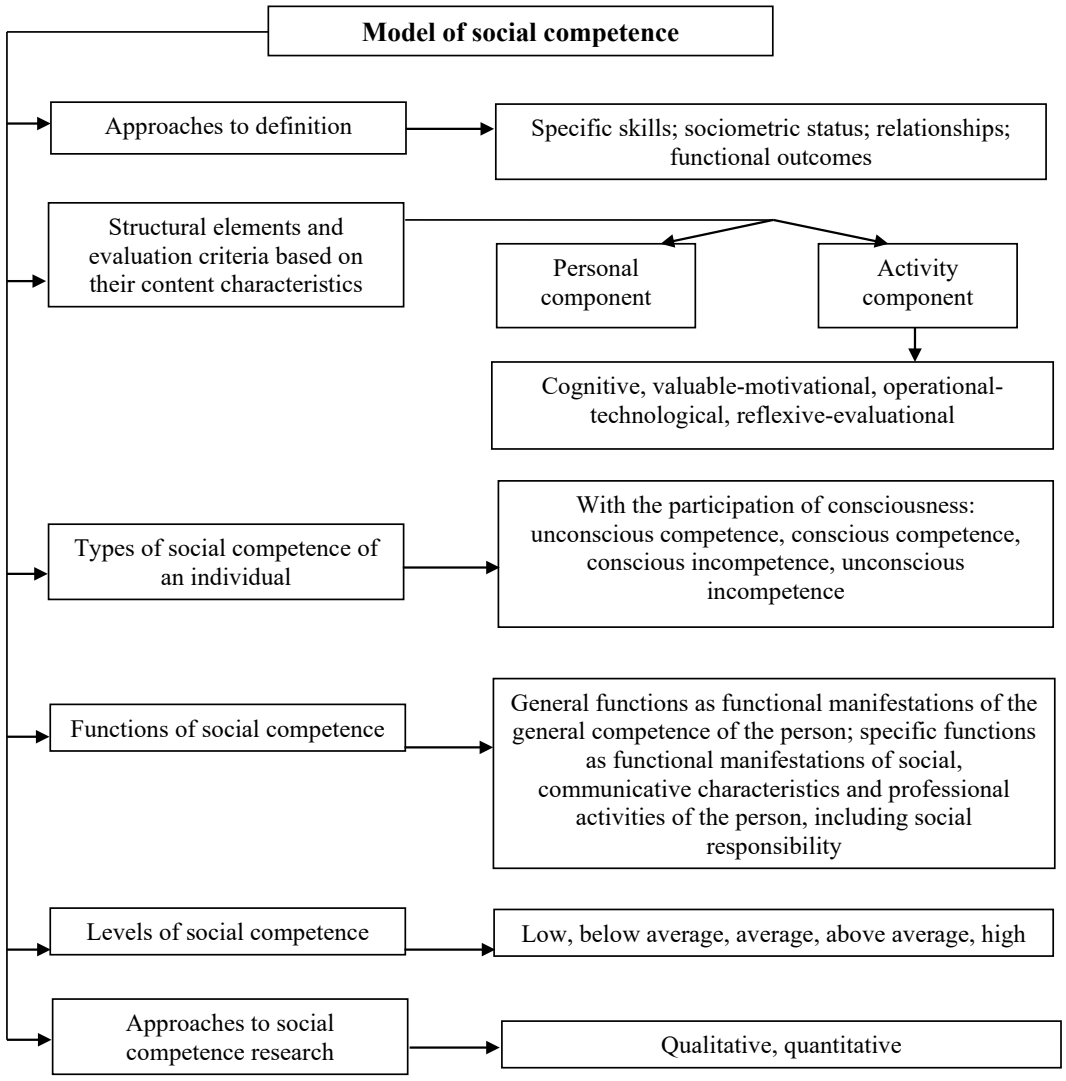

Figure 1. Model of social competence

Source: created by the authors on the basis of (Varetska, 2014; Rose-Krasnor, 1997; Zarubinska, 2010)

than on social behaviour. Social competence is a multidimensional structure that determines the interaction of many competences: communication, assertiveness, ability to accept criticism, etc., and depends on the values, attitudes of the persons involved, as well as on the rules, standards and expectations of professional behavior. The researchers note that socially competent behavior can mean very different things depending on the context and situation.

The formation of each component that is part of the structure of social competence of young scientists is associated with the formation of its characteristics and properties as part of a holistic system and involves taking into account a number of criteria. The content of criteria and indicators is determined by the desire for self-realization, the presence of optimal personality qualities. Also, the criteria for the formation of social competence of young scientists were determined on the basis of a holistic, systematic understanding of the socialization of the individual, the allocation of its functional and structural components, its definition as a process and result of socializing influences, the adoption of professional and moral values during professional and personal actualization (Tyulpa, 2020).

Formation of social competence of a person takes place in a team (group). It is through interaction in the group that the basic foundations of social competence are accumulated: social knowledge and the ability to apply them in practice. This approach allows to consider social competence as a component of the educational process and as an integral result of such processes as education, development, self-development, communication and self-realization (Riabukha, 2017).

The importance of joint teamwork is most clearly underlined by Henry Ford's statement that the beginning is together, progress is together and success

is together (Rahimić, Perla, 2022). This is practically impossible without a clear division of roles in the team. The idea of group roles was developed in the "Team Wheel" model developed by Margerison (2002). The management process in this model is divided into eight work functions and one area of coordination activity, which is called "networking" / "communication". Symbolically, the model is represented as a wheel with eight segments and a core. In accordance with these eight core functions, eight types of individual strengths, or team roles, are fixed. A separate role for "rallying" is not allocated, as it is believed that this type of activity can be performed by any team member with developed communication skills.

Another well-known approach dedicated to the distribution of team roles is the team roles of R.M. Belbin (2010, 1996). In teams of young scientists, it is also possible to involve participants belonging to action-oriented roles (Shaper, Implementer, Completionist, Finisher), human-oriented roles (Coordinator, Teamworker, Resource Explorer) and cerebral roles (Organizer, Observer, Evaluator, Specialist). In this study, Belbin's approach was investigated by the authors on the example of a target group of young scientists.

3. Methodology

Theoretical part: **Comparison of literature** sources on the following questions: "What is the relationship between teamwork and social competence?" "Is teamwork as a component of social competence important for young scientists?" "How can we promote the development of social competencies in the education and training of young scientists?" "What are the challenges facing Ukraine in the development of social competence in the education and training of young scientists?"

In the practical part the authors used the Belbin Team Role Inventory (BTRI) based on the Role theory proposed by R. Belbin (Belbin, 2010). Statistical data processing was performed using the SPSS statistical software package (v. 22), which included descriptive statistics, factor and cluster analyzes. The sample included 1201 young scientists (respondents were surveyed in 2020 online via Google form).

4. Results

In this study, the authors for the first time identified the orientations of young scientists to team roles (coordinator, shaper, organizer, Monitor evaluator, Teamworker, implementer, resource researcher, finisher) according to the approach of R. M. Belbin (2010, 1996).

The analysis of role team orientations of young scientists in training (Table 1) shows that in general young scientists are oriented to all team roles, although some of them are more popular than others.

Table 1
Levels of team-role orientations of young scientists (% of the total number of respondents)

Team roles	Levels		
	High	Middle	Low
Implementer	58.6	28.8	12.6
Teamworker	56.0	32.2	11.8
Coordinator	23.8	42.2	34.0
Finisher	23.5	37.2	39.3
Monitor evaluator	19.7	43.2	37.2
Resource investigator	19.4	46.6	34.0
Shaper	17.4	41.7	40.9
Organizer	16.0	34.5	49.5

Source: composed by the authors based on the research results

The study found that the heads of educational organizations consider the most important team role to be the role of the Executive. A high level of orientation to this role is observed in 58.6% of respondents, which indicates that young scientists have well-developed organizational and coordination skills, i.e., the ability to transform ideas into specific tasks and organize their implementation.

The second most important team role was the role of "Teamworker", which is oriented by 56.0% of respondents. This team role contributes to reaching agreement in the team, removing misunderstandings, knowledge of the needs and problems of the teaching staff.

This confirms the correspondence of the team roles "Implementer" and "Teamworker" to the main functions of young scientists.

At the same time, much fewer young scientists are oriented towards a more "leadership" team role of the Coordinator. Thus, only 23.8% of respondents were highly oriented towards this team role.

It should be noted that somewhat similar data were obtained in other studies of heads of educational and scientific institutions (Karamushka & Fil, 2007). The researchers found that a small number of educational managers are oriented to the team role of the Coordinator (20.58% of respondents have a high level of orientation to this role). Scientists explain this fact by the formalized structure of educational managers, when the main work tasks and decisions are given from the top.

Also noteworthy is the fact that only 23.5% of respondents have the command role "Finisher" at a high level. That is, there is a problem with the implementation of the tasks. This situation, which is quite common in the work of young scientists, may be caused by the need for young scientists to perform different jobs simultaneously when they lack time,

energy and/or resources. In our opinion, the role of the finisher is important for the full cycle of organizational activities.

Also, young scientists have weak orientations to the team roles of "Monitor evaluator" and "Resource investigator". Only 19.7% and 19.4% of respondents have a high level of orientation to these roles, respectively, although these team roles reflect important functions of young scientists, such as resource search, creation of favorable conditions for new activities, and evaluation of work.

No less disturbing, according to the authors, is the weak orientation of young scientists to the team roles of Shaper and Organizer – only 17.4% and 16.0% of respondents have a high level of orientation to these roles, respectively. This indicates that young scientists have rather weak abilities to unite the efforts of the entire teaching staff and generate new ideas.

Particularly notable is the fact that the least important for young scientists was the team role of the Organizers, although this role is relevant for new and innovative organizational activities and creative approach of scientists to work. Taking into account the above, it can be argued that there is a need to strengthen the orientation of young scientists to the team role of the Organizers.

Thus, the data obtained, according to the authors, indicate the need for a certain leveling of team roles performed by young scientists for their flexible use in specific professional situations. This is especially true for the roles of Monitor evaluator, Resource investigator and Organizer, which are responsible for the innovation activities of organizations.

Since the team-role complementarity (interchangeability) is an important principle of teamwork in educational organizations, the authors conducted a factor analysis of the data reflecting the orientation of young scientists to the main team roles.

Factor analysis identified three leading factors that reflect the orientation of young scientists to the main team roles (Table 2). These factors describe 50.77% of the total variance and include the most closely related indicators.

Table 2

Young scientists' orientations to team roles (based on the results of factor analysis)

Team roles	Factor 1	Factor 2	Factor 3
	Initiation	Shaping	Search
Organizer	0.580		
Teamworker	-0.743		
Shaper		0.523	
Coordinator		0.464	
Monitor evaluator		0.441	
Implementer		-0.787	
Resource investigator			0.800
Finisher			-0.567

Source: composed by the authors based on the research results

Factor 1 ("Initiation") explains 18.52% of the total variance of the data, which is bipolar and combines the following team roles: a) on the positive pole – the role of the Organizer (0.580); b) on the negative pole – the role of the Teamworker (- 0.743).

The *positive pole* of this factor is the orientation of young scientists to a team role, which ensures the creativity of the team and the generation of innovative and non-standard ideas (Organizer).

This factor's *negative pole* is related to emotional leadership, which reach agreement in the group, clears up misunderstandings, and is concerned with the needs and problems of team members (Teamworker).

Factor 2 ("Shaping"), which explains 17.53% of the total data variance and is also bipolar, reflects another set of team roles that are necessary for the successful work of teams in the young scientists' teams, namely: a) at the positive pole are the roles of Shaper (0.523), Coordinator (0.464), and Monitor evaluator (0.441); b) at the negative pole is the role of Implementer (- 0.787).

This factor's *positive pole* reflects young scientists' orientation to the team roles that provide scientists' leadership and team-members' joint efforts (Shaper), scientists' ability to highlight different points of view and make well-balanced decisions (Coordinator), as well as scientists' ability to analyze situations, make logical conclusions, and provide control (Monitor evaluator).

This factor's *negative pole* is related to young scientists' orientation to the team roles that are responsible for the transformation of ideas into specific tasks and for the accomplishment of these tasks (Implementer).

Factor 3 ("Search") explains 14.72% of the total data variance and is also bipolar, combining the following team roles: a) at the positive pole is resource Investigator (0.800); b) at the negative pole is Finisher (- 0.567).

This factor's *positive pole* reflects the young scientists' orientation to the team role that ensures team's interaction with the external environment (Resource investigator).

This factor's *negative pole* is related to the young scientists' orientation to the team role that encourages the team to do everything on time and to complete the job (Finisher).

Thus, the results of factor analysis demonstrated the possibility of a certain "compression" of team role positions, which, according to the authors, can be the basis for modernization of the classical eight-role structure of management teams in educational organizations (Belbin, 2010). However, the roles

that belong to opposite poles are obviously directly opposite. Therefore, in situations where team members have to perform several roles simultaneously, such performance becomes impossible.

Further, according to the results of factor analysis, cluster analysis was conducted, which allowed to identify four types of heads of educational organizations with appropriate management styles and orientations to team roles: organizing, forming, researching and initiating (Table 3).

Table 3
Young scientists' manager types (in relation to their team-role orientations)

Factors	Clusters			
	Organizing	Shaping	Researching	Initiating
Initiation	-0.57839	-0.43392	-0.41580	1.18575
Shaping	-0.38105	1.23621	-0.75490	0.03549
Search	-1.13413	0.27067	0.81047	-0.15306

Source: composed by the authors based on the research results

As can be seen from Table 3, the types of young scientists who are oriented towards certain "extended" team roles are distributed as follows.

The **first type (organizing)** includes young scientists who have a high negative average value of the factor "Search" and a slightly lower negative value of the factor "Initiative", which indicates a tendency to perform structured work to its completion within the established limits. The factor "Formation" is not manifested.

The **second type (shaping)** is characterized by a high average value of the factor "Shaping" and insufficiently expressed by other factors. That is, representatives of this type are focused on leadership, uniting the efforts of team members, interest in different points of view to make informed decisions, control over work. At the same time, such managers are not inclined to search and research.

The managers of the **third type (researching)** have high values on factor "Search" and high negative values on factor "Shaping" with insignificant values on factor "Initiation". That is, young scientists of this type look for options, resources and means to achieve goals in the external and internal environment. At the same time, they are not oriented to developing good relationships in the team and generating new ideas and approaches.

The managers of the **fourth type (Initiating)** are characterized by high values for the factor "Initiation" and low values for other factors. That is, young scientists belonging to this type are creative, generate innovative and non-standard ideas in the team, have a rich imagination, and are able to solve non-standard problems. However, they are not able to find resources and build relationships.

The authors believe that young scientists of organizing and forming types use mainly traditional management styles in their work, while managers of research and initiative types use mainly innovative management styles.

The quantitative distribution of young scientists' management styles in team relation to young scientists' team roles is given in Figure 2.

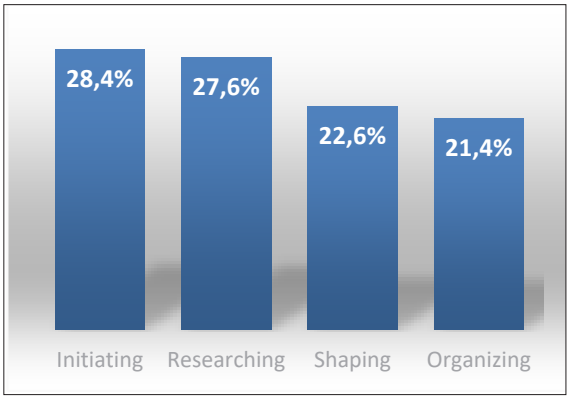

Figure 2. Quantitative distribution of management styles of young scientists in the team depending on the team-role orientation of managers (% of the total number of respondents)

Source: composed by the authors based on the research results

As can be seen from Figure 1, 21.4% of respondents belong to the organizing type and are quite organized, able to create a favorable working atmosphere in the team and interested in the results of work. 22.6% of young scientists belong to the forming type and are characterized by the ability to transform intentions into concrete action plans and complete the tasks. Almost every third young scientist (27.6%) belongs to the research type and is able to establish links with the external and internal environment in order to find new opportunities. Leaders of initiative type make up 28.4% of the total number of respondents and are innovators and generators of new ideas, as well as creators of friendly relations between all team members.

Thus, the data obtained indicate that a little less than half of young scientists (44.0%) use traditional management styles, and a little more than half of them (56.0%) prefer innovative management styles, which indicates a certain need for the development of such an element of social competence as Teamworking in the community of young scientists in Ukraine.

5. Conclusions

Teamwork is an important element of social competence of young scientists in Ukraine. In the theoretical substantiation of this work, the authors proved that social competence is formed in a team and created a model of social competence. Teamwork

belongs to the activity part of social competence. That is why in an additional survey, in cooperation with the NGO "ReSURS", a study of team roles was conducted according to the method of R.M. Belbin. The results of this study revealed in more detail and confirmed the main results of the main mass survey of young scientists of the project "Realization of the potential of young scientists in the context of integration of science, education and business", where Teamwork is one of the most developed soft skills of young scientists (Shkoda et al., 2020) at the maximum level. The results of the study, obtained by the authors using cluster analysis, showed that the types of managers are quite evenly distributed in the teams of young scientists: Initiative (28.4%), Research (27.6%), Shaping (22.6%) and Organizing (21.4%). Factor analysis showed some compression of team roles in the teams of young scientists. But, in general, young scientists need better development of such team roles as Monitor evaluator, Resource investigator and Organizer to increase their social competence.

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References:

Belbin, R. M. (2010). *Management teams. Why they succeed or fail.* Taylor & Francis. 204 p.

Belbin, R. M. (1996). *Team roles at work.* Butterworth Heinemann, Oxford.

Cechovsky, N. (2016). "Social Competences – What is it and how can it be taught at universities?" In: *Beiträge zur Entrepreneurship Erziehung und Gründungsberatung aus ukrainischer, russischer und europäischer Perspektive*, edited by R. Fortmüller, 37–44. Wien: Manz Verlag.

Erpenbeck, J., & Rosenstiel, L. (2003). Handbuch Kompetenzmessung. Stuttgart: Shäffer-Poeschel.

Euler, D., & Bauer-Klebl, A. (2008): Bestimmung und Präzisierung von Socialkompetenzen. In. Zeitschrift für Berufs- und Wirtschaftspädagogik, 104 (1), 16–47.

Gernego, I., Shkoda, T., & Savych, O. (2021). Marketing tools in strategic management of young scientists' human capital. *Baltic Journal of Economic Studies*, 7(4), 43–53. DOI: https://doi.org/10.30525/2256-0742/2021-7-4-43-53

Greimel-Fuhrman, B. (2013). Sociale Kompetenz – der kompenente Umgang mit Menschen in socialen Situationen. In: Sociale Kompetenz in Management, edited by B. Greimel-Fuhrman, 13–26. Facultas Verlags- und Buchhandels AG, Wien.

Grishina, N. (2005). Psychology of conflict. Saint Petersburg: Piter, 464 p.

Hartup, W. W. (1989). Social relationships and their developmental significance. Am*erican Psychologies*, 44, 120–126.

Ilie, A. (2010). The relevance of social competences in project- and process-oriented companies with regard to the current economic crisis. Master Thesis. Vienna, Vienna University of Economics and Business, Professional MBA.

Karamushka, L., & Fil, O. (2007). *Formation of a competitive management team based on the activities of educational organizations*. Kyiv: INKOS.

Ma, H. K. (2012). "Social Competence as a Positive Youth Development Construct: A Conceptual Review." *The Scientific World Journal*, 1–7. DOI: https://doi.org/10.1100/2012/287472

Margerison, C. J. (2002). Team Leadership: A Guide to Success with Team Management Systems. Cengage Learning EMEA. 208 p.

McFall, R. (1982). A review and reformation of the concept of social skills. *Behavioral Assessment*, 4, 1–33.

Monnier, M., Tschöpe, T., Srbeny, C., & Dietzen, A. (2016). Occupation-specific social competences in vocational education and training (VET): the example of a technology-based assessment. Empirical Res Voc Ed Train, 10. DOI: https://doi.org/10.1186/s40461-016-0036-x

Parliament of Ukraine (2014). Law of Ukraine "On higher education" as of 01.07.2014 № 1556-VII with last changes and additions as of 27.10.2022. Available at: http://zakon5.rada.gov.ua/laws/show/1556-18

Parliament of Ukraine (2002). Law of Ukraine «On innovation activity» as of 04.07.2002 № 40-IV with last changes and additions as of 12.04.2022. Available at: https://zakon.rada.gov.ua/laws/main/40-15#Text

Rahimić, Z., & Perla, V. (2022). Guide for the application of competencies in human resources management in the civil service of Bosnia and Herzegovina. Available at: https://parco.gov.ba/wp-content/uploads/2022/02/Vodic-za-primjenu-kompetencija_220x280mm_ENG_FINAL_WEB-1.pdf

Riabukha, I. (2017). Social competence as object of cognition and content component of training methodological support in the field of education. *Problems of modern tutorial book*, 19, 309–318. Available at: https://lib.iitta.gov.ua/709541/1/317d4024a5610eb5a713a5180a4b5160.pdf

Rose-Krasnor, L. (1997): The Nature of Social Competence: A Theoretical Review. *Social Development*, 6 (1), 111–135. DOI: https://doi.org/10.1111/j.1467-9507.1997.tb00097.x

Semenets-Orlova, I. (2017). Procedural aspects of educational changes: empirical findings at institutional level. *Advanced Education*, 64–67. DOI: https://doi.org/10.20535/2410-8286.82887

Semenets-Orlova, I., Klochko, A., Shkoda, T., Marusina, O., & Tepliuk, M. (2021). Emotional intelligence as the basis for the development of organizational leadership during the Covid period (educational institution case). *Estudios de Economía Aplicada*, 39(5), 1–15. DOI: http://dx.doi.org/10.25115/eea.v39i5.5074

Shkoda, T., Semenets-Orlova, I., Zhabin, S., Kyryliuk, V., Tepliuk, M., Maliarchuk, O., & Chebakova, T. (2020). Ressearch within the framework of the project "Realization of the young scientists' potential in integration of science, education, and business". Available at: https://www.youtube.com/watch?v=-KW4VrqCWzU

Tyulpa, T. (2020). Rationaling the criteria and indicators of the social competence formation of intended socionomic specialists. *Young Scientist*, 2(78), 142–145. Available at: https://molodyivchenyi.ua/index.php/journal/article/view/1284/1249

Trukhin, I. (2005). Social psychology of communication: teaching book. Kyiv: Centre of scientific literature.

Varetska, O. V. (2014). Pedagogika formuvannia tvorchoi osobystosti u vyshchij i zagalnoosvitnij shkolakh [Pedagogy of creative personality formation in higher and secondary schools]. *The Concept of "Individual Social Competence": Major Aspects,* 38 (91), 110–118.

White, R. (1979). Competence as an aspect of personal growth. In M. Kent & J. Rolf (Eds.), Social competence in children (pp. 5-22). Hanover, N.H.: University Press of New England.

Zarubinska, I. B. (2010). Formuvannia sotsialnoi kompetentnosti studentiv vyshchykh navchalnykh zakladiv (teoretyko-metodychnyj aspect) [Formation of social competence of students of higher educational institutions (theoretical and methodological aspect)]. Kyiv: KNEU.

Zinkivskyj, Yu., Mirskykh, G. (2008). Kompetentnist fakhivtsia – aktualna kategoria suchasnoi vyshchoi tekhnichnoi osvity [Specialist competence is a relevant category of modern higher technical education]. Higher Education. T. 1, № 3 (Annex). Special Issue "Pedagogics of higher education: methodology, theory, technologies".

World Economic Forum (WEF) (2019). These 4 trends are shaping the future of your job. Accessed 15 February 2019. Available at: https://www.weforum.org/agenda/2019/02/these-4-trends-are-shaping-the-future-of-your-job?fbclid=IwAR3pbgnKoUEYCKolljVCGMjQxDl55V1H6WmOZPWm8IDFZkKSqXH-Pdh2GPk

World Economic Forum (WEF) (2018). Future of Jobs Report. Accessed 15 February 2019. Available at: http://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf

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