

IMPACT OF RESOURCES OF ORGANIZATIONAL SOCIAL CAPITAL ON THE INNOVATIVENESS OF ENTERPRISES

Felicjan BYLOK

Czestochowa University of Technology, Czestochowa; felicjan.bylok@pcz.pl, ORCID: 0000-0001-5305-8634

Introduction/background: Social capital supports the flow of knowledge and information that are necessary for the creation of innovations in enterprises. Acceptance of the assumption that social capital has an impact on the creation of innovations had an influence on the formulation of the aim of the research.

Aim of the paper: The aim of the paper is identification of the relations between the organizational resources of social capital and innovative activities in enterprises.

Materials and methods: The assumed goal was executed thanks to the application of the survey method with the questionnaire technique. The research tool was a standardized survey questionnaire conducted by means of the CATI and CAWI techniques.

Results and conclusions: As a result of research, statistically significant dependencies between the resources of social capital and innovative activity were noted. Firstly, the resources of cooperation and values exert the greatest positive impact on cooperation with universities and research institutions in research projects that were conducted jointly, while also on the process of creating innovations and implementing innovative projects in enterprises. Secondly, the principles of cooperation, solidarity and values support the activities of managers aimed at stimulating the innovative attitudes of employees. Thirdly, the principles of cooperation, loyalty and solidarity have a positive impact on the creation of the optimal conditions for the formation and implementation of innovative projects.

Keywords: organizational social capital, innovations, enterprise, manager.

1. Introduction

The development of enterprises and their competitive position on the market to an increasingly greater extent depends on their innovative activities. Innovations are a significant means to achieve success in business activities (Evanschitzky et al., 2012). Currently, some enterprises are trying to advocate innovations in their activities, processes, products and services with the aim of enhancing their level of competitiveness. It has become important to create new knowledge that is essential to implement innovations, which should be distributed among their employees and availed of in all their everyday and routine activities.

This is a necessity in order for the enterprises to be able to respond to the requirements of a competitive market and rapidly changing requirements of clients.

In analysing the innovative conditions of an organization, the majority of researchers focus on the identification of the economic factors that have an impact on the innovative activities of enterprises, namely, outlays on R&D, the magnitude of companies, the form of ownership, the magnitude of competition, etc. (Baldwin et al., 2002). Relatively seldom does the focus of researchers lie on the determinants of intangible innovations. One of these is social capital, which creates the foundation of cooperation among employees, which is essential for undertaking innovative activities.

The notion of organizational social capital in essence relates to the ties and relations between the network members as a valuable source of knowledge and new ideas. Such aspects of organizational social capital, such as social relations, cooperation, participation, solidarity and loyalty are values that may support the innovative processes. By taking the resources of the organizational social capital into account, which place emphasis on the relations and interactions between employees, as well as the management and the organization, the author at hand has formulated the aim of this paper, which is to identify the ties between the resources of the organizational social capital and innovative activities. With relation to this aim, four research questions were created as follows: What is the scope of occurrence of social capital in the largest enterprises in Poland? Is there a relation between the organizational social capital and innovative activities and what is its nature? To what extent do the resources of social capital have an impact on the activities of managers in terms of stimulating the innovativeness of employees? In what sphere do the resources of social capital have an impact on the organizational factors supporting innovations in enterprises?

2. Theoretical background

Innovations in enterprises are the subject matter of interest of researchers and practitioners, who view them as the panacea for the development of an organization and reinforcement of their market position. In scientific literature, innovations are defined in various ways. For instance, Dziallas and Blind (2019) define innovations as “invention plus exploitation”, or in other words, they encompass the implementation of a new or significantly enhanced product, process or service, while also the commercialization of the innovation. Hence, the notion of innovation relates to innovative ideas that are to be commercialized on the market, as well as the ideas that have already been successfully commercialized. In turn, Kahn (2018) presented a holistic notion of innovations. According to the writer, it is possible to distinguish three ways of definition. Firstly, as a result, namely, explaining it in the context of a product, e.g. product innovations, as well as process and marketing innovations in a business model in

the supply chain and organizational network. Secondly, as a process, namely, presenting how the innovation should be organized, e.g. the general process of innovations and the process of developing a new product. Thirdly, innovations as a way of thinking relating to the internalization of innovations by the particular members of the organization in which innovations are instilled and embedded, together with the creation of the organizational culture supporting innovativeness.

A significant impact on innovations is exerted by social factors. One of these key factors is the organizational culture which supports creativity and innovativeness (Naranjo-Valencia et al., 2010). Research conducted by Lau and Ngo (2004) reveals that there is a strong relation between some types of organizational culture and the level of innovations. Researchers suggest that a developmental culture is favourable towards product innovations.

Another important factor that has an impact on innovativeness is that of the organizational social capital, which may be perceived as a resource, namely, a set of existing or potential resources of a productive nature that lies within the structure of an organization, or as a process encompassing the activities and interactions between entities of an intangible nature (Skawińska, 2012). One of the principal research trends is the resource approach in research and in the description of organizational social capital. According to Leana and van Buren (1999), the social capital of an organization may be defined as resources that reflect the nature of social ties in an organization. Inkpen and Tsang (2005), indicate that social capital is the aggregation of the resources that are available and are derived from the network of ties for physical entities or organizations. The members of an organization may avail of the resources of a network functioning in an organization without necessarily being their members. Likewise, Nahapiet and Ghoshal (1998) perceive social capital as organizational resources, according to which, it is the sum of actual and potential resources within an organization, which is available by means of the network of ties, involving the possession of an individual entity or social unit, as the basis of trust and cooperation between people that has an impact on the social ties enhancing the efficiency of the organization. In general terms, it is possible to say that the organizational social capital is an organizational resource that is based on the social ties connecting employees and creating a vibe of cooperation that is essential to accomplish collective goals effectively by the employees and the enterprise itself (Bylok, 2020).

A review of the numerous works relating to social capital in an organization facilitates the distinction of two fundamental approaches to its perception as follows: as a form of the ties of an organization with its stakeholders, partners, competitors (external notion of capital) and as the form and nature of ties between the members of an organization (internal notion of capital) (Leana, and Frits, 2006). External social capital takes on the form of network ties between the organization and external entities, namely, people, organizations, institutions and communities. However, internal social capital relates to the social ties connecting the employees of a particular enterprise that have an impact on the creation of the vibe of cooperation. The composition of this capital includes the ties of employees within the employee team and

inter-group ties that connect the members of various teams. The fundamental assumption of this approach is the conviction that the engagement and participation in an organization may bring benefits to both the organization and its participants.

In the analysis of the organizational social capital, it is possible to describe its dimensions. Nahapiet and Ghoshal (1998) built a research construct consisting of three dimensions of social capital, which mutually interpermeate. The first one is the structural dimension that encompasses the ties between the members of the network, the configuration and the adequateness of the network. Network ties are connections between the members of an organization and may have an impact on the scope of information transfer, e.g. in a situation where the employees are more connected with each other and due to this fact, they share information or knowledge to others willingly. The second one is the cognitive dimension which consists of symbols, codes, common language and non-verbal artefacts that constitute the significance of the network. Their significance stems from the fact that common codes and codification as part of the common language support the diffusion of knowledge. The third one is the relational dimension that appears in the obligations, norms and trust. It encompasses trust, norms, regulations and identification, which all fulfil important functions in social relations.

Analysis of the dimensions of social capital in enterprises facilitates the definition of its attributes. The first of them is the structural element which encompasses social networks and information channels. It is possible to term this the capital of social networks. P. Bourdieu (1986) perceived the importance of social networks in the creation of resources. Participation in the network facilitates the acquisition of various benefits for individuals, albeit only in situations when they are long-lasting and geared towards mutual cooperation. The second one is of a normative nature in terms of creating the capital of values. It includes social norms that regulate the social ties in an organization and values. These ties are bilateral, mutual and are regulated by the organizational structure. Their shape is influenced by the degree of sharing a common vision of the organization that is determined by collective values (subject to the aims of the individuals and the aims of the organization itself). The third is of a moral nature, which include the norms of trust and mutuality. It is possible to term this the capital of trust, which signifies, according to the perception of Sztompka “resources and benefits flowing from the defined position in the networks of trust” (2007, p. 263). These three dimensions interpermeate, thus creating a multi-dimensional organizational fabric, which has a significant impact on the functioning of the organization. From the perspective of those managing an enterprise, it is important to have knowledge on the subject of the significance of the particular dimensions of social capital in order to be able to develop them in the appropriate way to achieve the assumed goals.

Research on the impact of social capital on the functioning of an organization reveals that the organizational social capital may help the innovativeness of the organization at hand. It is one of the key elements in transforming the business activities of an organization that is geared towards efficiency into an innovative one, which has an impact on the enhancement of

its competitiveness (Laužikas, and Dailydaitė, 2015). This stimulates innovations, education, while simultaneously influencing work efficiency (Sztaudynger, 2007). Apart from the benefits listed above, it is possible to indicate the role of social capital in terms of streamlining the transmission of knowledge and diffusion of new technological solutions among the network participants. Social capital favours the sharing of knowledge by means of providing access to tacit and explicit knowledge, while also the exchange of knowledge and innovations in a team (Hu, and Randel, 2014). The research findings of Ahmadi (2012) indicated that there is a significant relation between the dimensions of social capital and the effectiveness of knowledge management. Social capital as one of the most important organizational features supports the process of creating and sharing knowledge, which in turn leads to the achievement of a long-lasting competitive advantage. In addition, social capital has a positive impact on the growth of the position of the firm at hand on the market thanks to the transfer of knowledge acquired in the external networks, while also the spread of knowledge between the internal entities of the firm (Liu et al., 2010). In analyzing the impact of social capital on efficiency, Chiu et. al. (2006) observed that the organizational elements of social capital, such as trust, mutuality, common vision, common language norms and motivation have an impact on behaviour relating to sharing information. This is essential for the creation of innovations in the enterprises.

In sum, organizational social capital brings a multitude of benefits to an enterprise. This favours the diffusion of knowledge that is essential in terms of the creation of innovations, while also helping the process of the formation of innovations and their implementation. Thus, this is a strong prerogative for managers to develop their resources, which would bring measureable benefits for the enterprises they run.

3. Methods

Research was conducted in May 2019 among 179 enterprises from the list of the 500 largest enterprises in Poland in 2019 published by the Polish newspaper entitled *Rzeczpospolita*. The research was participated in by 74 manufacturing enterprises, 35 trading enterprises, 25 service enterprises, 20 manufacturing-service enterprises and 25 manufacturing-trading enterprises. Further variables were the magnitude of the employment structure and the level of revenue attained in the particular year of revenue, whereby the research was participated in by 139 companies employing between 201 and 500 workers and 46 companies employing over 501 workers, with revenues from 5 to 50 m PLN – 55 enterprises, from 51 to 200 m PLN – 85 enterprises, while over 200 m PLN – 39 enterprises. The respondents were representatives of these enterprises, e.g. personnel directors, HR department heads, while also specialists of the field of HR. In the selection of enterprises for research, the method of random selection was

applied. The collection of data involved the application of the opinion poll method with the survey technique. The research tool was a standardized survey questionnaire conducted with the CATI and CAWI techniques.

In the analysis of the research findings, independent and dependent variables were chosen. The resources of organizational social capital were chosen as the independent variable, whereas innovative activities in enterprises, the activities of department heads aimed at stimulating innovative undertakings and organizational factors influencing the innovativeness of employees were chosen as the dependent variables. With the aim of analysing the relations between the independent and dependent variables, Spearman's rank correlation coefficient was applied.

4. Results

4.1. Organizational resources of social capital in the enterprises analyzed

The level of social capital in an enterprise depends to a large extent on the degree of occurrence of its resources. On the basis of the resource concept of social capital, its resources have been distinguished, which include cooperation, solidarity, participation, loyalty and values. In Table 1, the research findings of five resources of social capital have been presented. One of the most important in the opinions of those analysed is that of cooperation, which is a behavioural component of social capital (48.1% of those analysed). Simultaneously, the most highly rated was sharing information, knowledge and learning from each other (52.1%) and possessing the skill of cooperation (50.8%). An equally important resource is that of values (48.5%) which is listed among the regulative dimensions of social capital. Among the indicators of this resource, respect for norms and values were the highest rated (51%). Another resource that is listed in the dimensions of social capital is solidarity, which is based on informal social norms. It increases the level of certainty in terms of taking risks on the part of the employees. In the enterprises analysed, it is the most lowly rated in comparison with the remaining resources (40.4%). An important resource of social capital is participation, which belongs to the structural dimension of social capital. Its significant indicator is the participation in integration events (53.7%), during which there is an opportunity to build informal ties between employees and department heads (46.4). The cognitive component of the dimension of social capital is that of loyalty. This first and foremost occurs when employees are ready to help other employees (55.5%).

By way of conclusion, social capital is at a medium level in the enterprises analysed, which may be acknowledged to be a significant factor that has an impact on their functioning. The high level of cooperation and values indicates the great potential opportunities of availing of them in terms of creating innovations in the enterprises analysed.

Table 1.*Evaluation of resources of social capital in enterprises analysed in percentage form*

Specification	Evaluation				
	1	2	3	4	5
Cooperation resource	16,3	17,0	18,6	27,1	21
Employees share information, knowledge and learn from each other	16,7	11,7	19,5	31,3	20,8
Employees apply knowledge from one area to resolve problems which appear in another area of the firm	18,4	19,5	19,5	25,7	16,9
Employees frequently contact the managers in the search for new solutions to the tasks commissioned for execution	18,4	16,7	18,4	25,7	20,8
The majority of employees have the skill of cooperation	15,1	17,9	16,2	29,1	21,7
Employees are creative in resolving problems at work	12,8	20,7	19,5	24,02	23,0
Solidarity resource	14,3	21,6	23,7	23,1	17,3
Employees display solidarity towards work colleagues	14,0	18,4	21,2	29,1	17,3
Employees place the general good over their own	19,6	24,6	26,8	15,1	13,9
Employees are ready to take risk in activities	7,8	25,7	22,3	20,7	23,5
Employees are featured by ethicality in their relations with other employees	10	17,8	24,6	27,9	20,7
Participation resource	17,8	19,7	17,3	24,9	20,3
Employees participate in integration events willingly	12,3	17,3	16,7	29,6	24,1
Employees create informal groups based on cooperation	17,3	19,5	21,2	27,3	14,7
The majority of employees are members of trade unions	24	22,9	18,9	17,8	16,4
Loyalty resource	15,2	16,6	24,3	26,6	17,3
Employees are loyal to each other	15,6	16,2	26,2	26,8	15,2
Employees are loyal to the firm where they work	15,6	21,7	27,3	19,5	15,9
Employees are ready to help other employees	12,8	11,1	20,6	30,1	25,4
Employees are benevolent and cordial with regard to each other	16,7	17,3	22,9	29,6	13,5
Value resource	15,2	16,5	19,5	27,7	20,8
The majority of employees have respect for norms and values	16,1	15,6	17,3	25,1	25,9
The majority of employees accept the dissimilarity of co-workers	17,3	17,3	20,1	29	16,3
Employees adhere to the ownership rights	11,7	16,7	21,2	29	21,4

Scale: 1 – I definitely disagree, 2 – I disagree, 3 – I neither agree nor disagree, 4 – I disagree, 5 – I definitely agree.

Source: self-analysis.

4.2. Relations between social capital and innovativeness of enterprises

Organizational social capital based on cooperation, solidarity, loyalty and values is favourable towards the formation of innovations. A starting point for the evaluation of its impact on innovations in the analysed enterprises was the evaluation of innovative activities (Table 2). The representatives of the analysed enterprises rated the impact of the implementation of innovations over the past five years the most highly in terms of the revenue acquired by the company (44.3% of ratings were rather good and totally good), while also the creation of innovations in the enterprise (43.2% of ratings were rather good and totally good). Subsequent to this, the respondents gave a positive appraisal of the cooperation with R&D units and universities (38.1% of ratings were rather good and totally good), while also the flow and creation of knowledge in the company (37% of ratings were rather good and totally good). The most negative appraisals were related to the cooperation with universities in research projects that led to the development of the company (39%) and activities undertaken in the sphere of the implementation of an innovative project (39%). In sum, the evaluation of

innovative activities is ambiguous as on the one hand, innovations are implemented in the analysed companies and are evaluated in a positive way, while on the other hand, they encounter obstacles. The negative appraisal of cooperation with universities in research projects by a significant percentage of respondents indicates that there is a need for change in this sphere. Financial incentives from the state would be helpful in terms of undertaking joint innovative projects by universities and enterprises.

Table 2.

Evaluation of innovative activities in enterprises in percentage form

Specification	Evaluation				
	1	2	3	4	5
Cooperation in research projects with universities led to the development of the firm.	19,5	19,5	27,9	18,4	14,7
Impact of implementation of innovations over the past 5 years on revenue acquired by the firm.	17,8	15,6	22,3	21,2	23,1
Cooperation with R&D units and universities.	18,4	17,3	26,2	20,1	18
Cooperation with innovation centres (transfer centre, technology parks).	16,2	19,5	29	19,5	15,8
Mechanisms of financing programs and projects devoted to innovativeness.	18,4	17,3	31,8	20,1	12,4
Activities undertaken in the sphere of implementing an innovative project.	22,3	16,7	30,1	13,9	17
Cooperation with brokers of innovation while implementing a project.	18,9	18,4	31,2	13,9	17,6
Creating innovation.	12,2	19,5	25,1	25,1	18,1
Flow and creation of knowledge in the firm.	19,5	18,4	25,1	19,5	17,5

Scale: 1 – totally bad, 2 – rather bad, 3 – neither good nor bad, 4 – rather good, 5 – totally good.

Source: Self-analysis.

The creation of innovations is a complicated process, in which the cooperation between employees, management and external entities is the key to the accomplishment of success. One of the factors that supports this process is the organizational social capital. In self-analysis, it was decided that the relations between the resources of social capital and innovative activities would be analysed. The Spearman rank correlation coefficient r_s was applied for analysing these relations, which illustrates the level of the impact of the resources of social capital on innovative activities. Analysis of the ties indicates that the cooperation as a resource of social capital has first and foremost a positive impact on cooperation with universities in research projects ($r_s = 0,233$, $p = 0,002$). A detailed analysis of the attributes of this resource indicates interesting ties. The attribute *of workers frequently contacting their managers in the search for new solutions to the commissioned tasks for execution* has a positive impact on cooperation in the research projects with universities ($r_s = 0,162$, $p = 0,029$) and on the activities undertaken in the sphere of the implementation of an innovative project ($r_s = 0,165$, $p = 0,030$). The attribute of the *majority of employees having the skill of cooperation* has a positive impact on cooperation in research projects with universities ($r_s = 0,269$, $p = 0,000$), on the revenue of the company that has been acquired over the past five years relating to the implementation of innovations ($r_s = 0,224$, $p = 0,003$) and cooperation with the innovation centres ($r_s = 0,175$,

$p = 0,019$). However, the attribute that *employees are creative in terms of solving problems at work* has a positive impact on cooperation with universities in research projects ($r_s = 0,152$, $p = 0,042$) and cooperation with the innovation centres ($r_s = 0,150$, $p = 0,044$).

The resource of solidarity has a positive impact on the process of creating innovations ($r_s = 0,237$, $p = 0,001$) and on the flow and creation of knowledge ($r_s = 0,247$, $p = 0,001$). Analysis of the indicators of this resource with innovative activities indicated the following relations: the process of creating innovations is influenced by the following attributes: *employees feel solidarity with their other work colleagues* ($r_s = 0,277$, $p = 0,000$), *employees are ready to undertake risk in their activities* ($r_s = 0,165$, $p = 0,027$) and *employees are featured by ethicality in relations with other employees* ($r_s = 0,277$, $p = 0,000$). The flow and creation of knowledge in the enterprise are positively influenced by the attributes of *employees placing the common good over their own* ($r_s = 0,208$, $p = 0,005$), *employees are ready to undertake risk in their activities* ($r_s = 0,162$, $p = 0,005$) and *employees are featured by ethicality in relations with other employees* ($r_s = 0,187$, $p = 0,013$).

The resource of participation has first and foremost a positive impact on the process of the flow and creation of knowledge ($r_s = 0,254$, $p = 0,001$). Analysis of the impact of its attributes on the innovative activities indicated relations between the indicator *employees participate in integration events willingly* and cooperation with universities in research projects ($r_s = 0,176$, $p = 0,018$), while also the process of the flow and creation of knowledge ($r_s = 0,162$, $p = 0,032$). However, the attribute that *the majority of employees are members of trade unions* has a positive impact on cooperation with R&D units and universities ($r_s = 0,225$, $p = 0,002$) and a negative impact on the mechanisms of financing programs and projects devoted to innovativeness ($r_s = -0,149$, $p = 0,049$) and on activities undertaken in the sphere of the implementation of an innovative project ($r_s = -0,160$, $p = 0,031$).

The resource of loyalty has a positive impact on the cooperation between a company and universities in research projects ($r_s = 0,233$, $p = 0,002$), cooperation with R&D units and universities ($r_s = 0,158$, $p = 0,035$) and in terms of activities undertaken in the sphere of implementing an innovative project ($r_s = 0,196$, $p = 0,009$). A detailed analysis of the impact of the attributes of loyalty on innovative activities illustrated the following: there is a significant impact of the attribute *employees are loyal to the company where they work* on the cooperation of the company with universities in research projects ($r_s = 0,195$, $p = 0,009$), while the attribute *employees are ready to help other employees* has an impact on the activities undertaken in the sphere of the innovative project undertaken ($r_s = 0,206$, $p = 0,006$) and the process of creating innovations ($r_s = 0,19$, $p = 0,007$), while also the attribute that *employees are kind and cordial to each other* has an impact on the cooperation with R&D units and universities ($r_s = 0,203$, $p = 0,006$) and the mechanism of financing programs and projects devoted to innovativeness ($r_s = 0,225$, $p = 0,002$.)

The resource of values has first and foremost a positive impact on the cooperation of a company with universities in research projects ($r_s = 176$, $p = 0,018$). The attribute that *the majority of employees have respect for norms and values* has a positive impact on the cooperation of a company with universities in research projects ($r_s = 180$, $p = 0,016$). Likewise, the attribute that *the employees conform with ownership rights* has a positive impact on the cooperation of the firm with universities in research projects ($r_s = 252$, $p = 0,001$). In turn, the attribute of *the majority of employees accepting the alterity of co-workers* has a positive impact on the cooperation of a company with universities in research projects ($r_s = 178$, $p = 0,017$), as well as the revenue of the company over the past five years arising from the implementation of innovations ($r_s = 152$, $p = 0,043$) and on the cooperation with R&D units and universities ($r_s = 0,152$, $p = 0,042$).

In sum, the resources of social capital have varying degrees of impact on the innovative activities of the analysed enterprises. The greatest positive impact is exerted by the cooperation with universities and research institutions in research projects that are jointly executed. This relates to the resources of loyalty, values and cooperation. Likewise, a significant impact is exerted on the process of creating innovations and on the implementation of an innovative project in enterprises.

4.3. Role of managers in creating innovation in an enterprise

The process of creating innovations in enterprises is influenced by internal factors that include the following: managerial, organizational, personnel, financial, etc. Of these factors, the managerial factors hold an important position. Managers initiate, support and control the innovative activities. Analysis of Table 3 reveals that in the analysed enterprises, the greatest significance is attached to the requirements of the manager with regard to the necessity of enhancing the skills and improving the knowledge of employees, which in turn, serves to support the innovative undertakings (56.1% of responses were in the form of “I partly agree”, or “I totally agree”). Likewise, an important task for a manager is to openly communicate with the employees with regard to the expectations relating to their innovativeness (49.5% of responses were in the form of “I partly agree”, or “I totally agree”). A further task for a manager is to encourage taking on challenges that may bring benefits for the enterprise (48.8% of responses were in the form of “I partly agree”, or “I totally agree”). The smallest role in terms of stimulating the innovativeness of employees is played by the help on the part of the manager in terms of breaking down barriers in the process of implementing innovations (41.2% of responses were in the form of “I partly agree”, or “I totally agree”).

By way of conclusion, managers may significantly influence the creation of the innovative vibe in enterprises by means of encouraging employees to take action in favour of innovativeness, while also to enhance skills and improve knowledge that support these actions and open communication.

Table 3.*Activities of managers in stimulating the innovativeness of employees in percentage form*

Specification	Evaluation				
	1	2	3	4	5
Having high level of autonomy that facilitates the acceleration, slowdown or total resignation of the innovative undertaking.	24,5	14,5	15,6	13,4	32
Encouragement of taking on challenges, if the opinion is that they will bring benefits.	24	12,2	15	17,3	31,5
Expectation of enhancing skills and increasing knowledge, which may serve the support of innovative undertakings.	18,9	11,1	13,9	13,9	42,2
Expectation of creativity, thinking and activities in a novel and original way from the employees.	26,8	10,6	18,9	17,3	26,4
Aid in breaking down barriers in process of implementing innovations.	30,1	11,1	14,5	15,6	28,7
Openness of communication with employees relating to innovativeness.	25,1	12,6	12,8	23,4	26,1
Support by the managers of employees who want to search for novel solutions.	24	11,8	20,6	21,2	22,4

Scale: 1 – I totally disagree, 2 – I partly disagree, 3 – I neither agree, nor disagree, 4 – I partly agree, 5 – I totally agree.

Source: Self-analysis.

The principles of organizational social capital support the activities of managers with regard to the formation of innovative undertakings. Analysis of the mutual relations between the resources of social capital and the activities of managers that support the innovativeness of employees reveals that the resources of cooperation have a positive impact on their expectations with reference to their employees in the sphere of enhancing skills and increasing knowledge, which may serve the support of innovative undertakings ($r_s = 226$, $p = 0,002$). Likewise, the resources of cooperation have a positive impact on the scope of autonomy of the manager that facilitates the acceleration, slowdown or total resignation from the innovative undertaking ($r_s = 196$, $p = 0,009$). The resource of solidarity is positively correlated with several activities of the manager that are aimed at the creation of innovation. The strongest relation occurred between these resources and the expectation of creativity, thinking and activities of a novel and original manner from the employees ($r_s = 252$, $p = 0,001$). Apart from this fact, solidarity is positively correlated with the support of employees who want to search for novel solutions on the part of their managers ($r_s = 196$, $p = 0,009$), expectation of creativity, thinking and activities in a novel and original way by the employees ($r_s = 173$, $p = 0,021$), while also encouragement of the employees to take on challenges if they are acknowledged to bring benefits to the company ($r_s = 169$, $p = 0,029$). The resources of participation are positively correlated with the help provided by the managers to break down barriers in the process of implementing innovations ($r_s = 189$, $p = 0,011$). Apart from this, the resources of participation have a positive impact on the autonomy of the project manager that facilitates the acceleration, slowdown or total resignation from the innovative undertaking ($r_s = 180$, $p = 0,016$) and the support of the employees who want to search for novel solutions on the part of their managers ($r_s = 180$, $p = 0,016$). Analysis of the relations between the resource of loyalty and the activities of the manager in the sphere of stimulating innovative activities facilitated the establishment of

significant dependency between this resource and the openness of communication with employees with regard to the expectations relating to innovativeness ($r_s = 148$, $p = 0,016$). The resource of values has a significant impact on the help provided by managers in terms of breaking down the barriers in the process of implementing innovations ($r_s = 227$, $p = 0,002$) and on the encouragement of employees to take on challenges if they are acknowledged to bring benefits to the company ($r_s = 221$, $p = 0,001$).

In sum, the resources of social capital support the activities of managers in terms of stimulating the innovative attitudes among the employees. The resources of cooperation and values have the greatest impact on particularly such activities of the managers as openness of communication with the employees relating to the expectations regarding innovativeness, help provided to the employees in terms of breaking down the barriers in the process of implementing innovations and expectations with regard to employees in terms of enhancing their skills and increasing knowledge, which may serve the support of innovative undertakings.

4.4. Role of organizational factors in development of innovation in enterprises

The development of the innovativeness of the employees in enterprises is influenced by a multitude of organizational factors. In research, evaluation has been conducted on several of these, which may be acknowledged to be significant. Analysis of Table 4 reveals that the most important is the utilization of the creativity of the employees in activities geared towards new solutions (53.7 % of responses were in the form of “I partly agree”, or “I totally agree”). Likewise, the functioning of easy availability for employees to information and knowledge in the enterprise is important (51.4% of responses were in the form of “I partly agree”, or “I totally agree”). Apart from this fact, the existence of cohesive goals of development relating to innovative undertakings is significant (49.8% of responses were in the form of “I partly agree”, or “I totally agree”), while also the creation of optimal conditions for cooperation between units/departments (49.4% of responses were in the form of “I partly agree”, or “I totally agree”). However, the majority of the negative ratings were attributed to the factor of the functioning of the system of rewarding employees for supporting the creation of new solutions (42.9% of responses were in the form of “I partly agree”, or “I totally agree”).

In sum, the factors that had a positive impact on the development of innovations are first and foremost the cohesion of the aims of development of innovation, creativity of employees in innovative activities and the creation of easy access to information and knowledge, while also the optimal conditions for cooperation within the enterprise. The task of the management of enterprises should be the creation of a motivational system that would encourage employees to undertake innovative activities.

Table 4.*Role of organizational factors in development of innovations in enterprises*

Specification	Evaluation				
	1	2	3	4	5
Existence of cohesive aims for the development of innovative undertakings.	24	14,5	11,7	16,2	33,6
Availing of the suggestions of clients or competition, which facilitates the enhancement of products.	26,8	11,1	15	20,6	26,5
Functioning of easy access of employees to information and knowledge.	25,8	15	7,8	13,4	38
Creation of optimal conditions for cooperation between units/departments.	18,9	12,2	19,5	17,3	32,1
Functioning of the conviction that innovations have much greater opportunities for success if the employees may apply untypical and unique solutions in their everyday work.	26,8	12,2	15,6	15	30,4
Availing of the creativity of employees in terms of activities aimed at innovations.	21,7	12,8	17,8	20,6	27,1
Functioning of the system of rewarding that supports the creation of new solutions.	25,6	17,3	12,2	16,7	28,2
Expectation of initiatives from the employees in terms of activities aimed at innovations.	21,7	12,8	17,8	20,1	27,6

Scale: 1 – I totally disagree, 2 – I partly disagree, 3 – I neither agree, nor disagree, 4 – I partly agree, 5 – I totally agree.

Source: Self-analysis.

One of the aims of this paper was to define the impact of social capital on the organizational factors that support innovations in enterprises. Analysis of research reveals that the strength of the impact of the particular resources of social capital on the organizational factors was differentiated. The resource of cooperation had the greatest impact on the existence of the cohesive aims of the development of innovative undertakings that are well-known to the employees ($r_s = 0,322$, $p = 0,000$). Subsequent to this, it had an impact on the creation of the optimal conditions of cooperation between units/departments ($r_s = 0,214$, $p = 0,004$) and on the motivation of the employees associated with the increase in acknowledgement in the company for the outcome of creating new solutions ($r_s = 0,192$, $p = 0,010$).

The resource of solidarity had an impact on the skill of transforming ideas into profitable undertakings ($r_s = 0,217$, $p = 0,003$), and on the motivation of the employees associated with the increase in acknowledgement in the company for the outcome of creating new solutions ($r_s = 0,207$, $p = 0,005$) and on the existence of the cohesive aims of the development of innovative undertakings that are well-known to the employees ($r_s = 0,184$, $p = 0,014$).

The resource of participation had a significant impact on first and foremost the cohesive aims of the development of innovative undertakings that are well-known to the employees ($r_s = 0,241$, $p = 0,001$). Apart from this fact, it had an impact on the motivation of the employees associated with the increase in acknowledgement in the company for the outcome of creating new solutions ($r_s = 0,184$, $p = 0,014$).

The resource of loyalty significantly influenced the creation of the optimal conditions of cooperation between units/departments ($r_s = 0,245$, $p = 0,001$). Apart from this fact, it had a positive impact on the feeling that innovations have a greater chance of success if the

employees can apply the untypical and unique solutions in their everyday work ($r_s = 0,185$, $p = 0,013$) and on the speed of availing of the suggestions of clients or competitors in terms of enhancing the products ($r_s = 0,189$, $p = 0,011$).

The resource of values significantly influenced the cohesion of the aims of the innovative undertakings that are well-known to the employees ($r_s = 0,277$, $p = 0,000$) and the feeling that innovations have a greater chance of success if the employees can apply the untypical and unique solutions in their everyday work ($r_s = 0,214$, $p = 0,001$). Apart from this fact, the resource of values to a lesser extent had an impact on the use of the creativity of employees with the aim of achieving profit ($r_s = 0,189$, $p = 0,011$) and on the creation of optimal conditions for cooperation between units/departments ($r_s = 0,167$, $p = 0,025$).

In sum, the analysis of the relations between the organizational resources of social capital and the organizational factors that support innovations illustrated that a significant impact was observed in the case of the resource of values, followed by the resources of cooperation, loyalty and solidarity. These resources first and foremost had an impact on the creation of the optimal conditions for cooperation between units/departments, while also on the cohesion of the aims of developing innovative undertakings, as well as the functioning of the system of rewarding employees for supporting the creation of new solutions.

5. Discussion and Summary

From the viewpoint of research on the innovativeness of enterprises, this research facilitated the identification of the resources of organizational social capital in large enterprises in Poland and the definition of their impact on investment activities. The fundamental contribution of this research is the integration of the construct of the resources of organizational social capital with the factors that have an impact on the innovative activities in an enterprise.

The findings of the research conducted facilitated the formulation of the conclusions. Firstly, the research findings indicate the medium level of occurrence of the resources of social capital in large enterprises in Poland. The resources of cooperation and values appear to the greatest extent. In the case of the resource of values, the most important attributes are sharing information, knowledge and learning from each other, while also the large frequency between the manager and the employees in the search for new solutions. However, in the resource of values, respect for the norms and values of the majority of employees and conforming with the ownership rights are of key significance. These resources create favourable conditions for undertaking innovative activities on the part of their employees.

Secondly, the generalized indicator of innovativeness in the largest companies is at a medium level. Out of the innovative activities undertaken by the enterprises, the cooperation with R&D centres and universities was rated the most highly, while the impact of the implementation of innovations over the past five years on the revenue acquired by the company,

while also creating innovations in the enterprise, whereas activities undertaken in the sphere of implementing an innovative project and cooperation with universities in research projects were rated the lowest. It may be reflected that enterprises should place greater emphasis on cooperation with universities and research institutions with the aim of generating new solutions and creating innovative products. Likewise, it is necessary to strengthen activities associated with implementing innovative projects.

Thirdly, the resources of social capital have an impact to varying degrees on the innovative activities of the analysed enterprises. The greatest positive impact of these resources is exerted in terms of cooperation with universities and research institutions in research projects that are conducted jointly. Likewise, they exert a significant impact on the process and implementation of an innovative project in enterprises.

Fourthly, an important factor that has an impact on the level of innovation in an enterprise relates to the activities of managers that stimulate the innovativeness of the employees. The actions of the manager are of the greatest significance as they involve the open communication with the employees with regard to the expectations referring to their innovativeness and encouragement towards innovative activities, which may bring benefits to the enterprise, while also expectations from the employees relating to the enhancement of their skills, while also increasing their knowledge, which in turn, may serve to support innovative activities. The actions of the manager support the resources of organizational social capital, particularly the resources of cooperation, solidarity and values.

Fifthly, the impact of the organizational factors was identified, first and foremost the use of the creativity of employees in terms of activities aimed at new solutions, the functioning of easy access for employees to information and knowledge in an enterprise, cohesion of the aims of the development of innovative undertakings (while also the creation of the optimal conditions of cooperation between units/departments in terms of the innovativeness of the employees. The research findings on the dependencies between these factors and the resources of social capital indicate the existence of significant relations between them. This particularly relates to cooperation, loyalty and solidarity that have an impact on the creation of the optimal conditions for the creation and implementation of innovative projects.

The author of this paper wishes to indicate the limitations in the use of the research findings on the impact of the resources of social capital in terms of innovativeness in enterprises. The limitation on the research referred to the application of the survey method which did not facilitate a more profound analysis of the mechanisms of the impact of social capital on the process of creating innovations. With relation to this fact, it is worth undertaking qualitative research, which would facilitate the discovery of the mechanism of its impact and work out indications as to in what way social capital should be used in order to support the process of creating innovations in enterprises. The aim of future research could be to prepare a conceptual model that would outline the organizational role of social capital in terms of stimulating the innovative attitudes of employees and creating innovative solutions in their work.

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