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EXAMINING THE COMPONENTS OF ORGANIZATIONAL SOCIAL CAPITAL IN HUNGARIAN COMPANIES

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Abstract

The measurement of organizational social capital (OSC) is extremely important, since numerous studies have found that social capital in organizations significantly affects employee job satisfaction, workplace creativity, innovativeness, and organizational performance. In this study, the strength of social capital in Hungarian organizations was assessed using a three-dimensional approach (cognitive, relational, and structural). Data collected from 405 Hungarian employees were used in empirical research to validate research model and hypotheses. IBM SPSS Statistics 27 and AMOS 23.0 were utilized for the statistical evaluations. Confirmatory factor analysis (CFA) was used for construct validation. An empirically validated model of eight dimensions and thirty items was developed to assess various aspects of organizational social capital in a work environment. Relationships among OSC components were examined using structural equation modeling (SEM). In order to determine if there were any differences in distribution of values of research dimensions among groups based on the business sector (public, private, non-profit) and the organization size (5-9 employees, 10-49 employees, 50-249 employees, 50 employees or more), the Kruskal–Wallis test was used. In the case of a significant result of the Kruskal–Wallis test, the groups showing significant differences were determined using the Dunn–Bonferroni post hoc test. In order to examine differences between managers and subordinates, the Mann–Whitney test was applied.

This study found that of the three elements of organizational social capital, the cognitive dimension is the basis of the relational dimension, which in turn determines largely the structural element. Additionally, it was demonstrated that there are significant differences among sectors, company sizes, as well as between managers and subordinates in terms of the comparative evaluation parameters of organizational social capital. The study results provide insight into the structure of social capital in the workplace, which can be useful to managers and HR professionals.

KEY WORDS: organizational social capital, confirmatory factor analysis, structural equation modeling, cognitive, structural, relational OSC

Introduction

In numerous studies, social capital has been demonstrated to influence employee job satisfaction (Yamaguchi 2013; Lange 2015), workplace creativity (Bhatti 2020), innovativeness (Bylok 2021; Orlova 2022), and organizational performance (Szabó 2021,) by determining the quality of cooperation within organizations. In this sense, organizational relationships, a company's structure, and policies, as well as the characteristics of workers to adapt to the work environment play a significant role (Nahapiet & Goshal 1998). Among the main outcomes of this dynamic is the quality of organizational relationships, which allows firms to respond effectively to customer demands and competing actions. In order to better understand these previously mentioned behaviors that have occurred within any enterprise, the literature has considered them as elements of organizational social capital, innovation, creativity, engagement, and work satisfaction, which when taken together help us to understand how individuals bounce back from adverse situations and achieve positive outcomes.

In recent years, it has become increasingly obvious that research on the empirical measurement of organizational social capital does not adopt a single approach. There are some studies that do not provide any breakdown of structural, related or cognitive dimensions; instead, the strength of organizational social capital is determined by a set of statements (scales), which are often is noteworthy, however, that there is a group of statements (Pérez-Luño et al. 2011) that do not divide organizational social capital into dimensions but cover all three dimensions.t divide them into dimensions. Another part of the study (Maurer & Ebers 2006; Chow & Chan 2008; Fandiño et al. 2015; Akram et al. 2017; Ha & Nguyen 2020) measured organizational social capital from a cognitive-relationalstructural perspective, but the divisions and elements of the dimension are not identified. Accordingly, the measure of the structural dimension in this situation is usually related to connectedness, social and work networks (Jaworski & Kohli 1993; Inkpen & Tsang 2005) measured by statements related to trust, whereas the measure of relationships is based on scales of `common vision` (Tsai & Ghoshal 1998). The studies in the third group use a much more complex approach than in the first two groups: the measurement of organizational social capital or a cognitive-relational-structural three-dimensional approach with the division of dimensions into divisions and elements (Ganguly, Talukdar, & Chatterjee 2019) or in other multidimensional approaches other than the structural-relationship-cognitive model (Jamshidi & Kenarsari 2015). The theoretical basis of the research is developed in accordance with the cognitive-relationalstructural three-dimensional model, with the division of measurements into professional divisions and elements of capital, which provides an integrated approach to measuring organized social capital. The breakdown of capital into elements is also important because it provides an opportunity to study the individual impact of each element of capital on employee satisfaction, creativity, and autonomy, as well as innovation.

Thus, there is no consensus among researchers regarding the structure and content of organizational social capital. There is a lack of empirical research regarding the validity of specific models in terms of their key constituent elements. As a result, there has been no attempt made in the literature to determine the nature of the interaction between the dimensions of organizational social capital. The present study fills some of these gaps in the literature on organizational social capital.

Conceptualizing of research

Organizational social capital (OSC) - a brief description

As previously indicated, this research work is taken as a basic structural definition contends that organizational social capital consists of structural components (overall relationship pattern between actors or relationships among employees), relational (characteristics of personal relationships within the network of trust among employees) and cognitive dimensions (shared meanings and values among network participants) components (Nahapiet & Ghoshal 1998; Inkpen & Tsang 2005). The next step is to discuss the literature which supports our's model consideration of each of the three main OSC elements mentioned above.

Cognitive dimension of OSC

The norms, values, attitudes, and beliefs that influence cooperation are forms of cognitive social capital (Uphoff & Wijayaratna 2000). The nature of social capital in this context is more internal and subjective (Uphoff 2000). Or relates to the understandings that arise from organizational membership, including organizational identification (Kroll, Dehart-Davis, & Vogel 2019). As the context in which collective action takes place, cognitive social capital is formed by the broader organizational mission and values (Andrews 2010). This cognitive dimension refers to those resources in a social system that lead to shared representations, interpretations and systems of meaning (Nahapiet & Ghoshal 1998). Therefore, that could be determined by the degree to which colleagues have a shared understanding of their work tasks and their collaboration. In a number of studies, shared goals have also been considered to be a key construct of cognitive capital (e.g. Chow & Chan 2008; Fathi, Eze, & Goh 2011), or even suggested as a common definition of social capital (Engbers, Thompson & Slaper 2017).

The conclusion that can be drawn from these arguments, as well as the one on which the research will be based, is that the cognitive dimension plays a fundamental role in determining the very nature of all organizational behaviors. In other words, this is the initial root cause of everything that is discussed regarding OSC. It is reflected in proposed model by the acceptance of common goals among employees, which is expressed as one subdimension - Shared goals (SHG).

Relational dimension of OSC

The relational dimension refers to 'those assets created and leveraged through relationships' (Nahapiet & Ghoshal 1998, p. 244). Essentially, it focuses on the quality of relationships between actors (Kroll, Dehart-Davis & Vogel 2019). In this regard, the relational dimension consists of OSC elements that define working relationships. Based on the literature reviewed in this research, three key things stand out: (1) Trust & reciprocity (TRUST); (2) Willingness to knowledge sharing (WKS); (3) Justice & fairness (FRNS).

Structural dimension of OSC

According to Nahapiet & Ghoshal (1998), the structural dimension OSC is the pattern of connections between actors within a social system. A discussion of this topic has been developed in structural theories of social capital in particular the role played by the patterns and configurations of social ties. Hezlett & Gibson (2007), for instance, propose that individuals whose social ties span gaps in otherwise unconnected networks benefit from the diverse information they have access to and can use. Thus, the structural dimension of social capital may refer to aspects of organizational climate that aid these interactions and networks (Wah *et al.* 2005).

In the opinion of many researchers, the OSC structural dimension is essentially an amalgamation of the elements that define the constructive working relationships themselves. This understanding will serve as the basis for future discussions. To further develop the proposed vision, the following elements have been included in this dimension based on the research literature: (1) Perceived managerial support (MNGSP); (2) Teamwork (TW); (3) Colleagues support (CLGSP); (4) Interpersonal relations (PSR).

Aims and Research Questions

A major goal of this study is to develop the concept of organizational social capital, propose a theoretical model that can be used to measure the structure and strength of organizational social capital, and empirically prove the model. Furthermore, it is interesting to examine whether there are differences across sectors, industries, company sizes, and positions in an organization in terms of the comparative evaluation parameters of subelements of organizational social capital.

The following research questions have been formulated.

1. What are the structural elements of organizational social capital, and how do they interact?

2.In what ways do the effects of determining factors of the organizational environment differ depending on the sector, company size, and position of the respondent?

Research Model and Hypotheses proposed in the current study

Hypotheses 1

Figure 1 explains the research model of this study suggests positive associations between elements of organizational social capital. Three-dimensional measures are used to measure the power of organized social capital: structural, relational, and cognitive. According to the model, the structural dimension, which includes working relationships, is represented by four elements: perceived management support, employee support, teamwork, and interpersonal relationships. The element of social capital is measured by trust and reciprocity, as well as willingness to share knowledge and constructs of justice and integrity. Cognitive capital is assessed in terms of shared goals and values.

Each proposition is represented within the conceptual model. Additionally, the direction of the relationships is shown in addition to the paths among the variables.

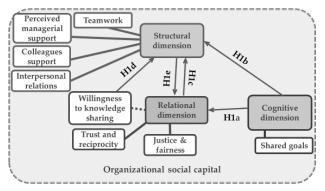


Fig 1. Research Model Source: Authors' own construction

There were not many research papers that discussed the topic of predestining dependencies between the elements of organizational social capital. In the meantime, predestining relationships can be established based on interactions between sub-dimensions.

Proposition H1a: Shared goals \rightarrow Relational OSC

According to research, trust is closely related to common organizational goals. Work network members who share common goals are more committed to each other and have a stronger sense of trust among them (Song *et al.* 2019; Huang *et al.* 2020). Indirectly, some outcomes show common goal commitment related to distributive and informational fairness. In addition, the relationship between procedural fairness and goal commitment may also be significantly positive (Groen 2018).

Proposition H1b: Shared goals \rightarrow Structural OSC

According to Chowdhury & Murzi shared goal/value is the first attribute of successful teams (2019). In relation to all measures of organizational performance, management support and shared goals are considered single-order factors (e.g., Chen *et al.* 2019). In her concept of aligning goals, Laack (2021) advocates cooperation by coordinating personal and organizational goals. A natural and strong form of support from colleagues will emerge during this process, leading to the formation of the most stable personal relationships and professional ties.

Proposition H1c: Relational OSC \rightarrow *Structural OSC*

A high level of interpersonal trust among team members encourages open discussion, understanding of work-related problems, and effective communication within a team (Politis 2003). Having a high level of trustworthiness enables an individual to be more approachable and communicate with others, thereby enhancing the quality of their interpersonal relations (Willem & Scarbrough 2006). It has been shown that supervisors' fairness and support are associated with employees' trust (Kalshoven, Den Hartog & De Hoogh 2011). The development of trust is generally closely related to the support of management as well as that of colleagues (Hayton, Carnabuci & Eisenberger 2012).

Organizational justice is an antecedent to both management and colleagues support (Moorman, Blakely & Niehoff 1998). Justice is one of the foundations of the resources of any relationship (Cordelli 2015). Actions that express interactional fairness foster high-quality interpersonal relationships (Kyei-Poku 2014). Peer procedural justice strength influenced team outcome variables, including performance, through teamwork processes (Cropanzano & Benson Iii 2011).

Proposition H1d: Willingness to knowledge sharing \rightarrow Structural OSC¹

Nathan et al. (2019) found that corporations' financial performance is significantly impacted by knowledge and innovation management dimensions. A positive effect of the intention to share knowledge has been observed on construction teams (Zhang & Ng 2012). Golden & Raghuram (2010) examine the central role of knowledge sharing in interpersonal relationships and argue that it plays a key role in the quality of these relationships. As employees' intentions to share knowledge act as a moderator in building organizational citizenship behaviors (Han *et al.*, 2019), it may well predict organizational support, including both management and colleague support.

Proposition H1e: Structural OSC \rightarrow *Relational OSC*

Working together for the sake of mutual benefit and reciprocity is an integral part of teamwork (West, Tjosvold & Smith 2008). Trust and reciprocity are an integral part of personal relationships (Eisenstadt, Aizenshtadt & Roniger 1984). According to Kalshoven, Den Hartog & De Hoogh (2011), supervisors' fairness and support are associated with employees' trust. According to Settoon & Mossholder (2002), trust is extremely closely related to coworker support. Supervisory support has a reciprocal effect on subordinates (Chen *et al.* 2008).

Nielsen (2015) shows that organizational justice, colleagues' support, and supervisory support are connected. Positive social relationships contribute to interpersonal justice at the individual, organizational, and community levels (Prilleltensky 2012). Peer procedural justice strength influenced team outcome variables,

¹ At the stage of initial testing of the model one of the three components of Relational OSC - `Willingness to knowledge sharing` demonstrated much greater internal validity when viewed autonomously. Therefore, mathematically, it is more accurate to consider WKS as an independent

component of organizational social capital, which is associated with relational dimensions although it is not an integral part of this element of OSC.

including performance, through teamwork processes (Cropanzano & Benson Iii 2011).

(H1) In light of this, the following hypothesis was formulated: Organizational social capital elements can be categorized based on their hierarchical structure, according to the theoretical research model.

Hypotheses 2

Previous research has shown that different considerations for any research model may be influenced by the sector, size of the company, and position of the respondent (e.g., Borisov & Vinogradov 2019A; Borisov & Vinogradov 2019B). Because of this, the study included as control variables the respondent's position (manager or boss/subordinate employee); company size (6-9 people/10-49 people/50-249 people/250 or more) and sector focus (public/private/non-profit).

(H2) Accordingly, the following hypothesis was formulated: Organizational social capital components' differ depending on the sector, company size, and position of the respondent.

Materials and methods

Questionnaire

Developing the questionnaire began with a review of the literature for measuring dimensions that were similar to those included in the model. An important selection criterion was the quality of the statistical results achieved by the authors during the testing of their research models. In light of the results of this initial selection, a sample of studies has been compiled on the elements of the proposed model.

In order to measure organizational social capital (the first light groups), a sample survey was selected from Anderson, Coffey & Byerly (2002), Rooney & Gottlieb (2007), Andrews (2010), De Schrijver *et al.* (2010), De Clercq, Dimov & Thongpapanl (2013), Chuang, Chen & Chuang (2013), Fandiño *et al.* (2015), Demirel, Ketken & Kunday (2012), Kiratli *et al.* (2016), Kim (2017), Parfyonova *et al.* (2019) and Cech & Rothwell (2020). A list of selected statements for each dimension of organizational social capital can be found in table 2 (see Appendix).

Measures & Instrument development

Following the back translation methodology developed by Brislin (1970), all the scale items were translated into Hungarian with the assistance of Hungarian colleagues. During this process, it is taken into consideration that cultural differences may affect the semantic equivalence of different versions of the questionnaire (Schaffer & Riordan 2003).

In order to convert the items into a survey format, they were written as declarative statements that contained an active verb, referred to employees' workplace experiences, and could be rated on a 5-point frequency scale from Totally Agree to Totally Disagree. The scores for all classes of relationships are reported as the means of the constituent items.

There were eight key groups of questions that were used to construct the main variables of the study: perceived managerial support, teamwork, colleagues support, interpersonal relations, trust & reciprocity, willingness to knowledge sharing, justice & fairness and shared goals.

Data collection

Respondents comprised a random sample of full-time workers employed by organizations or entrepreneurs with at least one other colleague. Participants were invited to complete an online survey between March and April 2022.

There were 438 responses to the survey. It was decided to exclude incomplete responses (failure to complete more than half of the full items) and those who failed screening questions, as well as follow-up questions, from further analysis. This resulted in only 405 responses, allowing them to be analysed.

Description of the Sample

The generalized characteristics of the organizations from which the data were collected are as follows. Depending on the number of employees, these organizations are grouped into five categories: 0 to 4; 5 to 9; 10 to 49; 50 to 249; and 250 or more. The 56.3% of the sample consisted of organizations with more than 250 employees. The organizations belong to three different activity (industrial) sectors, and the majority are service organizations. In addition, these organizations are grouped into three different business sectors, and the majority are private companies. Prior to the recent period, the majority of organizations (93.8%) had been in operation for more than 10 years.

Data Analysis

The constructs identified based on the literature review in the conceptual model subsequently validated by conducting a confirmatory factor analysis (CFA) as a part of structural equation modeling (SEM). A reflective measurement model was used to indicate the contribution of each item to its associated construct (Garson 2016). For every item, no less than 0.6 factor loading was used as a criteria.

In accordance with recommendation of Malhotra & Birks (2018), the Cronbach's coefficient for all constructs exceeded 0.6, meaning that the constructs are reliable.

Convergent validity and reliability of latent constructs were also assessed using average variance extracted (AVE) and composition reliability (CR). AVE is the share of total variance explained by the latent construct, a number greater than 0.5 is a generally accepted level of convergent validity (Hair *et al.* 2009, Baumgartner & Homburg 1996). In construction reliability (CR), the common variance ratio of statements (items) belonging to the construct is expressed. Generally, CR higher than 0.7 is considered a good level of reliability (Hair *et al.* 2009). Latent structures are considered reliable if the value of AVE does not exceed the threshold value of 0.5, but the composition reliability exceeds the threshold value of 0.7 (Fornell & Larcker 1981; Henseler, Ringle & Sinkovics 2009; Lam 2012; Hair *et al.* 2017).

Additionally, Cronbach's alpha represents the lower limit of internal consistency reliability, while composite reliability represents the upper limit. Hair *et al.* (2017) suggest that the true reliability may lie between Cronbach's Alpha and composite reliability. It is therefore necessary to report both Cronbach's alpha and composite reliability. Since Cronbach's alpha has some limitations, the composite reliability of the constructs will be primarily used to assess the internal consistency of the constructs.

Structural equation modeling (SEM) was applied to test hypothesized causal effects between OSC dimensions and elements of collaborative work environments. The model fit was deemed acceptable if $\chi 2/df \le 5$ (Podsakoff *et al.* 2003), since comparative fit index (CFI), and Tucker-Lewis index (TLI) values were > 0.90 and Root-meansquare error approximation (RMSEA) < 0.08 (Hu & Bentler 1999; Steinmetz *et al.* 2009; Cieciuch *et al.* 2014; Schwartz & Butenko 2014).

In order to determine if there were any differences in distribution of values of research dimensions among groups based on the business sector (public, private, non-profit) and the organization size (5-9 employees, 10-49 employees, 50-249 employees, 250 employees or more), the Kruskal–Wallis test was used. In the case of a significant result of the Kruskal–Wallis test, the groups showing significant differences were determined using the Dunn–Bonferroni post hoc test. The Friedman test was used to examine the differences in the evaluation of the research dimensions. In order to examine differences between managers and subordinates, the Mann–Whitney test was applied.

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The statistical analyses were conducted using IBM Statistics SPSS Version 25 and AMOS Graphics Version 23.0.

Results and discussion

Validity and Reliability of Measurement (Outer) Model

Descriptive statistics of items and examined dimensions

Willingness to knowledge sharing has the highest mean value (4.12) among the elements of organizational social

capital (Appendix, Table 2). In OSC, the lowest mean value (2.99) is associated with the cognitive dimension (Shared goals). In terms of the Justice and fairness dimension, the respondent showed the lowest agreement (2.74) with the item: "My organization rewards employees according to their performance".

Internal Consistency Reliability

Further, all Cronbach's alpha values lie between 0.609 and 0.919, indicating acceptable reliability, with Cronbach's alpha for Interpersonal relations (alpha = 0.690) and Perceived managerial support (alpha = 0.919) lower than 0.70 but greater than 0.60.

Convergent Validity

The degree to which a measure correlates positively with alternative measures of the same construct is known as convergence validity. In order to determine whether a data set is converging, the average variance extracted (AVE) is used, which represents the cumulative mean of squared outer loadings from a group of items of a latent variable. AVE scores should equal or exceed 0.50, indicating that the construct accounts for more than half of its own variance (Hair *et al.* 2017). All values of AVE are greater than 0.50 (see Appendix, Tables 2,3). As such, the requirements for convergent validity have been met.

(H1) Organizational social capital elements can be categorized based on their hierarchical structure, according to the theoretical research model

Proposition H1a: Shared goals \rightarrow Relational OSC

This proposition was supported by the findings of the study. In line with previous research, this finding is quite consistent (Cugueró-Escofet, Fitó Bertran & Rosanas 2019; Song *et al.* 2019; Huang *et al.* 2020).

Proposition H1b: Shared goals \rightarrow *Structural OSC*

Cognitive social capital formed by 'Shared goals' is fully explanatory for Relational OSC (β = 0.651; S.E.=0.053; p<0.001) as well as Structural OSC (β = 0.194; S.E.=0.076; p=0.041). Previous studies have found similar results (Chowdhury & Murzi 2019; Chen *et al.* 2019; Laack 2021)

Proposition H1c: Relational $OSC \rightarrow Structural OSC$

According to the findings of the study, this proposition is supported. This finding is very consistent with previous studies that have been conducted (Politis 2003; Willem & Scarbrough 2006; Halbesleben & Wheeler 2015).

Proposition H1d: Willingness to knowledge sharing \rightarrow Structural OSC

Research results confirm the causal relationship between intention to knowledge sharing and structural organizational social capital, which is specified in the proposed model (β = 0.092; S.E.= 0.048; p=0.025). This is similar to the results of the following authors: Ren, Kraut & Kiesler (2007); Golden & Raghuram (2010); Zhang & Ng (2012).

Proposition H1e: Structural $OSC \rightarrow Relational OSC$

This proposition appears to be supported by the results of the study. The structural OSC has had limited effects on a relational OSC (β = 0.244; S.E.=0.081; p=0.006).

Thus Hypothesis 1 is supported by the data. Results of hypothesis 1 testing can be found in table 1.

Table 1. Details regarding the testing of hypothesis 1 for each assumption

Hypothesis		Standardized Regression Coefficient (β)	S.E.	р	Conclusion
H1	Cognitive (Supported			
H1a	Shared goals \rightarrow Relational OSC	0.651	0.053	< 0.001	Supported
H1b	Shared goals \rightarrow Structural OSC	0.194	0.076	0.041	Supported
H1c	Relational OSC → Structural OSC	0.558	0.132	< 0.001	Supported
H1d	Willingness to knowledge sharing → Structural OSC	0.092	0.048	0.025	Supported
H1e	Structural OSC → Relational OSC	0.244	0.081	0.006	Supported

Note: SEM: χ2/df = 3.295, CFI = 0.908; TLI = 0.892; RMSEA (90% CI) = 0.078 (0.076–0.080)

Source: Authors' own calculations

Nonetheless, it is worthwhile to consider not only the fact of hierarchy, but also the sequence of its elements. In order to increase clarity, it may be necessary to make a conditional simplification and provide an element of the research model that includes only the ratios of the dimensions of organizational social capital. In Figure 2, significant paths are shown among OSC's main components.

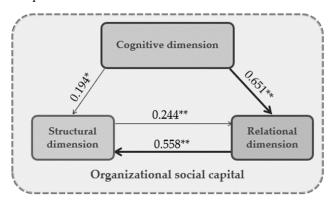


Fig. 2. A significant paths among the components of organizational social capital

Note: Based on the standardized regression coefficient, the line patterns (dashed line, thin line, medium solid line, solid line) indicate the strength of effects: non-significant, low, medium, and strong. Source: Authors' own construction

In the chain of Cognitive OSC \rightarrow Structural OSC \rightarrow Relational OSC, there is a connection, but it is weak. While at the same time, the chain of Cognitive OSC \rightarrow Relational OSC \rightarrow Structural OSC can be thought of as mediumstrong or moderate in strength. Hence, according to the research model, organizational social capital is hierarchically subordinated or aligned according to the second scenario rather than the other way around.

(H2) Variations in components of organizational social capital based on the sector, company size, and employee's position

The hypothesis was tested with the Mann-Whitney test, Kruskal-Wallis test, and Dunn-Bonferroni post-hoc test.

The radial diagrams are presented below in order to clarify and generalize the results of the second hypothesis test. The results that are significant are highlighted in bold in each diagram.

(1) Depending on the position of the respondents, significant differences were observed in their assessments of aspects of the working environment (Fig. 3). According to Mann-Whitney test results there is a significant difference between manager and subordinate perception of two out of eight examined dimensions: Perceive managerial support and Willingness to knowledge sharing.

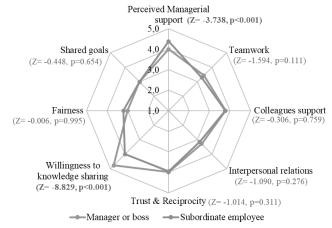


Fig. 3. Comparing managers and subordinates according to mean values of organizational social capital dimensions Source: Authors' own construction

The support provided by management to managers is generally less than that provided to subordinates (Z= -3.738, p <0.001). The fact that managers are in charge of support rarely implies that managers themselves are in need of support and guidance as well. It is essential, however, that management provides support to subordinate managers to ensure that the roles and abilities of every manager to lead in an organization are balanced.

Managers are generally more likely to share their knowledge than subordinates (Z=-8.829, p<0.001). It has been demonstrated by Connelly and Kelloway (2003) that employees' perceived management support for knowledge sharing significantly affects their willingness to share knowledge.

(2) According to the Kruskal-Wallis test and Dunn-Bonferroni post hoc test results (Fig. 4), there is a significant difference among sectors in each of the eight dimensions evaluated. Compared to private and nonprofit sectors, the public sector's OSC elements have significantly lower mean values. Moore (2000) suggests that non-profit organizations produce value that can be attributed primarily to social purposes. Despite the positive attitudes of public sector employees regarding willingness to share knowledge, Sandhu, Jain & Bte Ahmad (2011) concluded that knowledge sharing is not clearly communicated to them and many do not know whether their organization has a knowledge-sharing strategy. Employees in the public sector also exhibited self-serving biases when it came to their willingness to share knowledge compared with their perception of their colleagues' willingness to do so. In addition, respondents perceived organizational barriers as being more critical than individual barriers.

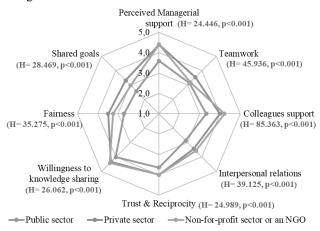


Fig. 4. Sector comparison based on mean values of organizational social capital dimensions Source: Authors' own construction

(3) According to Kruskal-Wallis and Dunn-Bonferroni post hoc tests (Fig. 5), seven out of eight dimensions examined show significant differences depending on the organization size: Perceive managerial support, Colleagues support, Interpersonal relationship, Trust & reciprocity, Willingness to knowledge sharing, Justice & fairness, Shared goals. Compared to other size groups, micro companies' employees rated OSC components significantly higher.

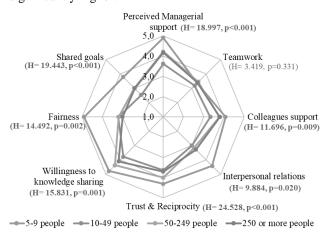


Fig. 5. Comparison of the size groups of enterprises based on mean values of organizational social capital dimensions Source: Authors' own construction

Based on Pearce and Herbig (2004), the psychological distance between team members can also increase as team size increases.

There is no conclusive evidence that organizational size correlates with the willingness to share knowledge in the literature review. According to Lekhawipat et al. (2018), the size of the firm is related to internal attributions and individual beliefs concerning knowledge-sharing behavior. In comparison with larger companies, smaller firms (fewer than 500 employees were considered small) are more sensitive to such barriers and individual beliefs.

According to Gould-Williams (2003), there are conflicting arguments concerning the relationship between shared goals and organizational size. One argument suggests that employees in large organizations have difficulty forming personal attachments and identifying with the organization's goals. In contrast, the opposing view asserts that large organizations offer individuals greater opportunities for advancement and interpersonal interaction, which can have the opposite effect. Most of these views are based on intuition on the part of researchers. In spite of this, the evidence is far from conclusive and it is difficult to predict whether or not there is a relationship between organizational size and shared goals.

These results support all perceptions with full support for Hypotheses 1.

Conclusions

The study was conducted according to a concept that identifies three dimensions of organizational social capital: cognitive, relational, and structural. The multidimensional scale has been developed and tested through a series of exploratory and confirmatory studies, which show that it is reliable and valid. Despite a significant number of subdimensions, in the sequel, this structure has shown high internal validity based on the proposed model.

The sequence of processes leading to organizational social capital formation has been explored. The use of structural equation modeling has demonstrated that the dimensions of organizational social capital are mutually influenced. The cognitive element determines the relational; and the relational element is the predominant structural element of organizational social capital. A framework such as this may also serve as a foundation for the conduct of further empirical research on the subject of organizational social capital. This also implies the significance of placing emphasis when selecting a particular development strategy and highlighting the need to maintain balance in developing the social capital of the organization.

Comparative analyses of various parameters depending on the sector, size, and position of the respondent in connection with the work environment are explicit and promising for managers from all sectors of the Hungarian economy. Essentially, the results stimulate a differentiated and, therefore, accurate approach to management.

Furthermore, it is worth pointing out that the role of organizational social capital has not been extensively researched in English-speaking literature in Hungary to date. As such, the study may be the first to develop an integrative perspective on organizational social capital within Hungarian organizations.

The general findings of the study emphasize the importance of organizations investing in the development of a positive working environment. Particularly it implies the need for managers and employees to set aside time for reflection and dialogue.

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Appendix 1

Table 2. Descriptive statistics of items, internal reliability

 and convergent validity of the first-order constructs

Code	Construct/Items	Mean (SD)	Loadings		
Perceived managerial support 3.81					
(Cron	(Cronbach's α = 0.919, AVE=0.758,				
	CR=0.967)	(1.11)			
NOICD1	My supervisor provides me with	3.75	0.700		
MNSP1	clear expectations of my work responsibilities	(1.22)	0.799		
	My supervisor is supportive	3.99			
MNSP2	when I have a work problem.	(1.21)	0.909		
	My supervisor treats my	(1.21)			
	mistakes as a problem to be	3.87	0.004		
MNSP3	solved rather than a focus for	(1.26)	0.884		
	criticism				
	My supervisor explains the	3.60			
MNSP4	reasoning behind decisions that	(1.38)	0.902		
	affect me	(1.50)			
NUCES	My supervisor communicates	3.82	0.055		
MNSP5	with me in an open and direct manner	(1.29)	0.855		
	Teamwork				
(Cron	bach's α = 0.830, AVE=0.665,	3.44			
(cron	CR=0.934)	(0.95)			
	My company encourages	3.24			
TMWK1	employee teamwork.	(1.16)	0.866		
	Teamwork is part of the				
TMWK2	problem-solving process at my	3.46	0.873		
	company.	(1.19)			
TMWK3	I feel I am really a part of the	3.68	0.698		
	group of people I work with	(1.13)	0.098		
TMWK4	There is team spirit among	3.49	0.812		
	employees in this organization	(1.08)	0.012		
	Colleagues support	3.72			
(Cron	bach's $\alpha = 0.784$, AVE=0.617,	(0.82)			
	CR=0.919)				
CLSP1	In our team, we openly share our thoughts without fear of	3.82	0.773		
CLSIT	rejection	(1.07)	0.775		
	I can rely upon my coworkers				
CLSP2	especially when things get tough	3.96	0.862		
	at work	(0.92)			
	My work team is one of the most	3.25			
CLSP3	meaningful social groups to	(1.19)	0.735		
	which I belong	(111))			
CLSP4	Frequently, my colleagues offered me assistance when the	3.75	0.767		
CLSP4	situation called for it	(1.04)	0.767		
	Interpersonal relations				
	bach's α = 0.609, AVE=0.574,	3.23			
(CR=0.874)	(0.88)			
	The company provides training				
IPSR1	to improve the interpersonal	2.78	0.600		
IFSKI	skills of employees to build good	(1.36)	0.699		
	relationships				
IDODA	Personal relationships in our	3.46	0.957		
IPSR2	company encourage a trustful working environment.	(1.08)	0.857		
	I look forward to being with the	3.34			
IPSR3	people I work with each day	(1.03)	0.707		
	Trust & reciprocity				
(Cron	bach's α = 0.807, AVE=0.722,	3.77			
$\frac{(0.80)}{(CR=0.935)}$					

TRST1	There is mutual friendship between employees	3.71 (0.94)	0.844					
TRST2	Employees have confidence in one another in this organization	3.59 (1.00)	0.894					
TRST3	Employees in this organization show a great deal of integrity	4.07 (0.86)	0.808					
Willin	Willingness to knowledge sharing							
(Cron	bach's α= 0.633, AVE=0.613, CR=0.890)	4.12 (0.64)						
WKS1	I actively share my professional knowledge with my colleagues	4.34 (0.78)	0.870					
WKS2	I share my ways to solve problems at the request of other group members	4.50 (0.68)	0.819					
WKS3	I am quite often attempting to convince people to support an innovative idea	3.09 (1.10)	0.642					
	Justice & fairness							
(Cron	bach's α = 0.882, AVE=0.743, CR=0.955)	3.14 (1.04)						
FRNS1	My organization treats its employees fairly	3.16 (1.16)	0.878					
FRNS2	My organization rewards employees according to their performance	2.74 (1.20)	0.889					
FRNS3	Employees in my organization are rewarded fairly	2.99 (1.34)	0.852					
FRNS4	Employees can count on being treated with courtesy and respect in my organization	3.74 (1.10)	0.826					
Shared goals (Cronbach's α = 0.896, AVE=0.763, CR=0.960)		2.99 (0.94)						
SHG1	In my organization, employees share the same ambitions and vision for the organization	2.80 (1.12)	0.891					
SHG2	In my organization, employees enthusiastically pursue collective goals and mission	2.97 (1.06)	0.925					
SHG3	There is a commonality of purpose among employees in this organization	3.06 (1.06)	0.811					
SHG4	Employees in this organization are committed to the goals of the organization	3.15 (1.03)	0.863					

Table 3. Second-order constructs

Dimensions	Mean (SD)	Loadings
Structural OSC		
(Cronbach's α= 0.833, AVE=0.768,	3.53 (0.77)	
CR=0.927)		
Perceived Managerial support	3.81 (1.11)	0.544
Teamwork	3.44 (0.95)	0.770
Colleagues_support	3.72 (0.82)	0.661
Interpersonal_relations	3.23 (0.88)	0.752
Relational OSC		
(Cronbach's α= 0.654*, AVE=0.788,	3.62 (0.63)	
CR=0.867)		
Trust & reciprocity	3.77 (0.80)	0.794
Justice & fairness	3.14 (1.04)	0.735
Willingness to knowledge sharing**	4.12 (0.64)	0.571
Cognitive OSC (Shared goals)	2.99 (0.94)	

*Pearson's correlation coefficient

**Based on the theoretical model, this element is related to Relational OSC, but shows low consistency with the other two elements, so it was not included in Relational OSC

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