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4.3. TRUST, RECIPROCITY, AND OTHER RELATIONAL NETWORK CHARACTERISTICS AS FACTORS OF ORGANIZATIONAL KNOWLEDGE SHARING¹

4.3.1. Introduction

New philosophies of management and economy have shifted the accent from the monetary assets of organizations to the processes that support the longevity of their strategies. The objectivist ideals of efficiency are being replaced by the ideas of constructing relative and/or non-pecuniary values. From this standpoint, knowledge sharing (KS) is not only a factor of organizational performance, but also the core element of organizational and social equilibrium. It embraces a large spectrum of phenomena that even go beyond habitual explanatory frameworks. Such an advance is due to several changes in scientific thinking : first, considering organizations as living entities has split up the “power – knowledge” equation [NOT 07] into two separate dimensions ; second, searching for the properties of KS units has moved beyond personality or knowledge characteristics [ARG 03] and, thus, further than previous attempts to build up KS causality.

The economic and cognitive paradigms dominate a considerable part of organizational studies. The former is a kind of “input – output” black box, which says nothing about its mechanisms. The latter focuses on individual determinants, such as individual incentive structures and/or perception of risks and benefits of KS [for example, CAB 06]. Some [for example, MOL 00] consider the social exchange paradigm as an alternative solution. Even though it overcomes the limitation of onefactor theories and embraces personal and situational aspects of KS, its rewarddeterministic bias does not go beyond interpersonal interactions either. Therefore, it limits organization to the sum of individual behaviors instead of defining it as a new social outcome. If we need to build up such KS causality that takes into consideration the social nature of both knowledge and organization, it would be based on the interplay between social identity and social network paradigms.

The social identity paradigm is neither a new nor a sophisticated concept, but has one very valuable quality. It renounces applying individual psychological characteristics to organizational behavior and, instead, endows individuals with characteristics of the social entity they belong to. Therefore, it allows us to examine

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social entities via their own characteristics [HAS 04]. From this perspective, the quality of KS depends on the extent to which employees identify themselves with either a whole organization or an organizational unit. The self-categorisation process

immediately results in social membership. Subsequently, it entails the definition of boundaries of social entities and, thus, produces a number of in-group phenomena, such as positive attitudes and trust toward the in-group, non-critical acceptance of group decisions together with out-group hostility and distrust [for example, SHE 53, HAS 04]. Therefore, organizational KS depends on such in-group characteristics as membership and trust.

Social network analysis [SNA] paradigm also examines differentialist backgrounds of social behavior [BUR 05, SCO 01]. The uniqueness of this approach is in the move towards greater flexibility such that organizational boundaries become symbolic and/or removable/extendible. SNA explains how the structure and modality of social ties affect the “path” of KS. Social network helps to specify dysfunctions, barriers and entrepreneurs of KS [BUR 05] and provides the strength of ties beneficial for a certain knowledge type [HAN 06]. Relational scope of network that affects the quality of KS refers to the idea of closure across structural holes [BUR 05]. Trust, reciprocity and reputation are the elements that help build cohesive areas around the knowledge gaps and, thus, foster KS. Even though, due to its origin, SNA primarily focuses on the structural characteristics of network and less on the relational ones, together with the social identity paradigm, it offers great opportunities in understanding factors of KS.

4.3.2. Dimensions of organizational KS

KS has been identified as the most powerful determinant of economic development [GRU 00], organizational perfection [LIA 04, SOE 03] and innovation [HAN 06]. Within an organization KS occurs naturally as a consequence of knowledge use in the form of knowledge search, distribution, diffusion, and transfer. The complexity and heterogeneity of this process is currently deconstructed into three themes: 1) the type of knowledge shared [POL 75, BAU 96]; 2) the direction of exchanges [FAN 05]; and 3) the phases of KS [HAN 06]. We know that KS is a cause of many organizational outcomes and are able to understand its procedural side, but what affects the quality of KS itself?

In the extensive literature review, Small & Sage [SMA 05] describe various KS factors. Re-clustered, they come to form three groups of variables: individual cognitive processes, organizational network structure and relations, and environmental factors. Argote *et al.* [ARG 03] propose the interactive template between: properties of units, properties of the relationship between units and properties of knowledge. In other

words, current research questions embrace the what, the why, and the how of KS. Many studies have attempted to answer the questions “Why share?” and “What should be shared?”. Few have asked the question “How should we share?”.

The most meticulously examined question “what should be shared?” led to the distinction between tacit versus explicit and individual versus collective forms of knowledge and defining them as separate and not sharable in the same manner [for example, BAU 96, GRU 00, POL 75, etc.]. On the one hand, they are not universally applicable to all organizational contexts [MAR 05]. On the other hand, those dimensions are not compatible with the thesis of socially constructed organizational knowledge [HIS 03]. In this sense, context-related characteristics of knowledge are more meaningful [MAR 05]. The context of social identity endows KS with the dimensions of similarity and closeness that may be translated as KS with hierarchy and among peers, or as KS on a whole or on a sub-network level. It was demonstrated that horizontal or peer-to-peer KS is more effortless as compared to upward or downward flows [for example, ZAK 04, FAN 05]. In the same way, KS within a sub-network, or an organizational unit, occurs in a more natural way than at the whole organizational network level. In both cases, identification with one’s own work unit and with colleagues (psychologically closer) is easier and more spontaneous [HAS 04], while hierarchy is considered as an obstacle to KS [for example, BUR 05]. Consequently, vertical organizational KS would demand more efforts and should be supported by compulsory mechanisms, such as organizational norms and sanctions.

HYPOTHESIS 1. – Horizontal, or peer-to-peer, KS depends on membership, trust and reciprocity to a greater extent than vertical KS, which depends more on norms and sanctions.

HYPOTHESIS 2. – Organizational KS depends on norms and sanctions to a greater extent than sub-network KS, which depends on membership, trust and reciprocity.

The “why share?” research cluster examines KS via either individual sociopsychological peculiarities [for example, CAB 06] or an organizational climate that derives from organizational needs of KS [BOC 05]. Together with its evident weaknesses, this trend has a valuable input that consists of rethinking the ideas of social control and social power. On the one hand, sharing means the leakage of knowledge, and thus, the loss of power. Therefore, the knower retains the knowledge s/he possesses in order to manipulate others. On the other hand, sharing is an alternative, divergent form of power strategy based on the “coverage” of influence [BUR 05]. In the networking perspective, sharing implies expansion of network, of influence, and thus of social power. This way, the question “why share?” brings up another one.

The third cluster “how should we share?” is about the substratum of organizational KS. This cluster owes a lot to the theory of structural holes [BUR 05], which defines social network as an environment and also a mechanism of KS.

4.3.3. Organizational network as a KS substratum

The organizational network is characterised by its structure, which may otherwise be metaphorically presented as an organizational sociometry, and by network relations embedded in this structure. Relational network scope alludes to the predispositions that assist KS within and across networks and refers to the relations embedded in membership, trust, reciprocity, norms and sanctions [CUM 03, GRÜ 00, SCO 01]. If the role of a network structure in KS was extensively investigated thanks to the theory of structural holes [BUR 05], relational network characteristics were taken into consideration fragmentally and not as an entire span.

Instead of focusing on isolated effects of each relational network characteristic, this paper tries to understand their relative and proportional contribution to KS. The first variable we address is membership. In general, membership, together with different forms (continuance, normative and affective) of commitment [GRÜ 00], is judged to be an important KS factor. A number of studies [from CAB 06] have provided a strong support for its influence on turnover, job satisfaction, helping behavior and KS. Liao *et al.* [LIA 04] proved that membership could affect attitudes toward KS. At the same time, Cabrera *et al.* [CAB 06] reported some fuzziness in the interrelation between membership and KS due to the interference of other organizational variables. Thus, membership should have a positive influence on KS, the nature of which has to be clarified. In terms of the facility of self-categorisation [HAS 04], identification with a smaller organizational unit is more concrete and, thus, stronger than identification with a whole organization. Since membership is a particular case of social category [HAS 04], this assumption is applicable to the relationship between whole network and sub-network forms of membership.

HYPOTHESIS 3. – Departmental membership has a greater impact on KS compared to organizational membership.

Further variables examined are trust and reciprocity. Trust is variously defined as a general disposition, a rational decision about cooperative behavior, an affect-based evaluation about another person and a characteristic of social systems [MAY 95, ROU 98]. The present study shares the idea that trust is a vulnerability and risktaking phenomenon. Within the organizational scope, trust facilitates social and resource exchanges, enhances organizational commitment, improves teamwork and enhances the organizational climate in general [MCE 03]. Various empirical proofs support the assumption that trust is a critical mediator of KS. Some researchers find it particularly

important for the sharing of tacit knowledge [for example, HAN 06, LEV 04]. Others believe it is essential for KS in general, regardless of the characteristics of knowledge. For example, the study of Liao *et al.* [LIA 04] found that trust, which arises from mutual respect and the perception of justice, assists unconditional KS within an organization. Trust has been articulated as an important factor of KS in strategic alliances [INK 00] and communities of practices [LAT 98].

As regards reciprocity, there is no single opinion about the way it should be classified: either as an independent variable or as a form of trust. Overall, it is characterised by a relationship, when people care for each other's interests, offer a service to others, or act for the benefit of others at a personal cost, or an expectation that this kindness will be returned in case of need [BUL 98]. Cabrera *et al.* [CAB 06] empirically demonstrated that reciprocity deriving from social support positively influences KS. If we take into consideration the model of uni- and bilateral trust [MCE 03], reciprocity may be identified as a bilateral trust, or its antecedent. At the same time, we know that reciprocity may occur when trust is established. Hence, reciprocity is a kind of behavioral response to trust, or in other words, bilateral behavioral trust-based phenomena. Some authors [for example, COL 90] consider reciprocity to be more effective than unilateral trust, since it implies the definition of social norms and sanctions of free-riding behavior. Others [for example, CAB 06] claim that both variables are essential to KS. Given the derivative nature of reciprocity the hypothesis is formulated as follows:

HYPOTHESIS 4. – Trust has more significant influence on KS across all organizational levels and dimensions compared to reciprocity.

According to the social identity paradigm, norms serve to define the set of appropriate social characteristics and behavioral patterns that are relevant to a certain social identity [HAS 04]. Norms determine which patterns of behavior are expected and valued in a given social context. Together with sanctions, they serve to cognitively simplify purposeful human interactions in repeated situations. Norms are executed thanks to sanctions, which assess and mark the degree to which social characteristics and behavioral patterns are adequate or alien to the identity defined. In the workplace, norms outline behavioral patterns appropriate at each organizational level, and repertoires of work situational responses (for example, crisis or helping behavior, etc.). As an essential part of organizational culture, norms and sanctions are especially important to networks with low trust, since they help to join network actors via formal rules and regulations [SOE 03].

Relationship between trust and norms and sanctions is not straightforward. It is clear that norms and sanctions refer to social control. Depending on how we define the relationship between trust, risk and control [for example, ROU 98], norms and sanctions are situated either on the trust or distrust pole. Thus, Coleman [COL 90]

believes they are assurance mechanisms that provide the protection against freeriding behavior and, thus, mechanisms of trust formation. However, if we assume that trust relates to vulnerability and risk, norms and sanctions are efficient in the context of distrust. It is particularly true for the KS between different levels of organizational hierarchy. Therefore, we suppose that:

HYPOTHESIS 5. – Norms and sanctions have greater influence on vertical than on horizontal KS. Trust and reciprocity have greater influence on horizontal KS.

4.3.4. Study

4.3.4.1. Survey, Measures, Data Collection and Sample

The present study was conducted in a French retailer. 131 employees from all levels took part in the study. Participation was voluntary; they were neither rewarded nor sanctioned. Relational network scope was assessed via the questionnaire measuring the perceived level of membership, trust, reciprocity, norms and sanctions [HJO 03, NAR 01, KRI 00]. KS was evaluated on the basis of the KS questionnaire that measured the perceived quality of KS at horizontal, vertical, whole network and sub-network levels.

4.3.4.2. Results

In order to test the relationships between KS (dependent variable) and relational network characteristics (independent variables) the bivariate correlation analysis was performed (Table 4.3 below).

<i>Variable</i>	<i>ksh_o</i>	<i>ksv_o</i>	<i>ksh_d</i>	<i>ksv_d</i>	<i>ksh_m</i>	<i>ksv_m</i>
<i>m_org</i>	0.191	0.177	0.261 ^[**]	0.244 ^[*]	0.126	0.329 ^[**]
<i>m_dpt</i>	0.071	0.035	0.050	0.105	-0.018	0.083
<i>t2_prof</i>	0.153	0.374 ^[**]	0.282 ^[**]	0.233 ^[*]	0.399 ^[**]	0.321 ^[**]
<i>t2_dpt</i>	0.040	0.270 ^[**]	0.349 ^[**]	0.185	0.355 ^[**]	0.139
<i>t3_org</i>	0.095	0.248 ^[*]	0.164	0.120	0.400 ^[**]	0.153
<i>t3_dpt</i>	-0.011	0.236 ^[*]	0.224 ^[*]	0.228 ^[*]	0.270 ^[*]	0.128
<i>r1_org</i>	0.071	-0.077	0.229 ^[*]	-0.066	-0.097	-0.068

<i>r1_dpt</i>	0.023	-0.132	0.295 ^{***}	0.102	-0.124	0.110
<i>r2_org</i>	0.208 ^{**}	0.123	0.197	0.114	0.039	0.052
<i>r2_dpt</i>	0.059	0.063	0.190	0.176	-0.033	-0.189
<i>n_org</i>	0.238 ^{**}	0.026	0.069	0.089	0.219	0.295 ^{**}
<i>n_dpt</i>	0.107	-0.106	0.190	0.098	-0.008	0.057
<i>sa_org</i>	-0.071	-0.060	0.116	0.089	-0.069	0.122
<i>sa_dpt</i>	-0.071	-0.036	0.021	0.031	-0.065	0.013

** Correlation is significant at the 0.01 level (2-tailed). *

Correlation is significant at the 0.05 level (2-tailed).

v = vertical; h = horizontal; org = organizational; dpt = departmental; m = managerial KS; m = membership; t = trust; r = reciprocity; n = norms; sa = sanctions.

Table 4.3. *Correlations between relational network parameters and knowledge sharing dimensions*

H1 about the greater impact of trust and reciprocity on horizontal KS and greater impact of membership, norms and sanctions on vertical KS was partly validated. This supposition is true for reciprocity. The influence of norms and membership is significant for the vertical managerial KS (manager – director).

H2 about the greater influence of trust and reciprocity at sub-network levels was partly confirmed. This statement is just for the interrelation between trust and horizontal KS. Indeed, trust has no affect on horizontal organizational KS, while it correlates significantly with horizontal departmental and managerial levels of KS. Overall, reciprocity has a somewhat saturated effect on KS, since it affects only horizontal departmental KS (0.229 and 0.295) and horizontal organizational KS (0.238).

H3 about the greater impact of departmental membership on KS was not confirmed. To the contrary, departmental membership has not any effect on KS. At the same time, organizational membership affects KS at the horizontal [employee – employee] (0.261) and vertical (employee – head of department) (0.244) departmental levels and at the vertical managerial level (manager – director) (0.329).

H4 about the more significant influence of trust on KS compared with reciprocity was confirmed. Indeed, trust significantly correlates with all levels of KS, except

horizontal organizational KS. Reciprocity affects only horizontal levels of KS: organizational and departmental ones.

As to H5 about the greater influence of norms and sanctions on vertical than on horizontal KS, the results of this study neither confirm nor reject it. Sanctions have no effect on KS at any organizational level. Norms demonstrate significant correlations with horizontal organizational KS (0.238) and with vertical managerial KS (0.295).

4.3.5. Discussion and further research

The principal finding of this study is quite predictable and refers to the impact of trust on KS. Regardless of the knowledge sought and shared and the levels and directions of KS perceived, trust remains the dominant determinant of KS. Trust is the most significant predictor of KS within sub-networks (in our case, horizontal departmental and managerial KS). This result is consistent with both the ideas of SNA about trust as a heart of a dense family-like network [for example, SCO 01], and with those of the small group theory [for example, SHE 53], where trust is considered as an in-group characteristic. Perceived quality of peer-to-peer KS mainly depends on trust, probably because at this level formal and non-formal ties are mixed up and, thus, hardly distinguishable. In the context of a highly hierarchical structure like the present case, such reaction is a response to the outer tension, when the need for psychological safety transforms into dense or even isolated subnetworks of a non- or semi-formal type. The fact that at the whole organizational level trust has no effect on horizontal KS, but influences vertical KS demands further investigations and interpretations in terms of the “trust – risk – control” equation. For some scientists [for example, COL 90], trust increases thanks to the means of control, such as norms and sanctions. Others [ROU 98, MAY 95, etc.] believe that control hampers natural network development, while trust emerges in spite of risk and enables interactions. Trust may be also a kind of credit a person gets from his/her interaction partner. This variety of interpretations of trust fits well with the distinction between cognitive and affective forms of trust. The latter, together with other kinds of trust [MAY 95], can clarify how trust formation determines KS dynamics, and vice versa.

Reciprocity influences the perceived quality of KS exclusively at its horizontal level, or in the context of peer-to-peer communication. Hjöllund and Svendsen [HJØ 03] previously demonstrated the similar effect in the domain of CoP. Krishna and Shrader [KRI 00] have discovered the same findings in communal projects. If we define reciprocity as a behavioral component of trust, it is then triggered by the same mechanisms. Thus, reciprocity has the same reverse relationship with control and power and is not appropriate to explain vertical KS.

The role of membership in KS is quite specific. Only organizational membership has an effect on the perceived quality of KS at the sub-network level. This outcome contradicts the social identity theory, according to which an employee identifies himself with a small part of an organization more easily than with an organization as a whole [HAS 04]. Probably, this confusion comes from the lack of attention to the structure of membership. In this sense, the analysis of its cognitive and affective components [GRÜ 00] could be useful. Social psychologists [for example, SHE 53] claim that membership and trust are interdependent. Similarly to the study of Cabrera *et al.* [CAB 06], the present case demonstrates that the impact of membership in KS cannot be isolated from the interference of other variables and, namely, trust.

Contrary to the opinion that norms and sanctions facilitate KS [for example, ZAK 04], there is little evidence that norms influence KS. This is probably due to the absence of the formulated organizational code. At the same time, tacit norms that characterise any organizational behavior, such as non-absenteeism, working extrahours, etc., have no significant influence on the process and content of KS. As regards sanctions, they have demonstrated zero impact on KS in the present study. One of the possible explanations of this effect is the model of trust as risk-taking phenomenon excluding control [ROU 98].

The absence of the obvious and polarised impact of relational network characteristics on the different KS dimensions has no singular meaning. This fact may refer to the limited framework of the study. Neither types of trust nor those of reciprocity and membership were measured in a multi-dimensional manner. Another key for the understanding of KS determinants may be the interrelation between network parameters themselves.

Relational network characteristics have a particular influence on KS. Some of the parameters examined are found to be insubstantial; others, like trust, have the ultimate role in this process. For practical application, knowledge of the major role trust plays in KS is not sufficient. More complex models including cognitive, affective and behavioral (= reciprocity) forms of trust could provide necessary precisions. The analysis of trust formation is another perspective that brings in parallels between its mechanisms and those of KS. Membership, which has a structure similar to trust, can be examined using the same dimensions and compared with trust. Finally, we need to define all the relational network characteristics in terms of their interdependence and, on this basis, in terms of their primary or secondary determination of KS.

4.3.6. Bibliography

- [ARG 03] ARGOTE L., McEVILY B. and REAGANS R., “Managing knowledge in organizations: an integrative framework and review of emerging themes”, *Management Science*, 49[4], 572-582, 2003.
- [BAU 96] BAUMARD P., *Organisations déconcertées : La gestion stratégique de la connaissance*. Masson, 1996.
- [BOC 05] BOCK G.-W., ZMUD R.W., KIM, Y.-G. and LEE J.-N., “Behavioral intention formation in knowledge sharing: examining the roles of extrinsic motivators, socialpsychological forces, and organisational climate”, *MIS Quarterly*, 29[1]? 87-111, 2005.
- [BUL 98] BULLEN P. and ONYX J., Measuring of Social Capital in Five Communities in NSW. <http://www.mapl.com.au?A2.htm>, 1998.
- [BUR 05] BURT R.S., *Brokerage and Closure: an Introduction to Social Capital*, Oxford University Press, 2005.
- [CAB 06] CABRERA A., COLLINS W.C., SALGADO J.F., “Determinants of individual engagement in knowledge sharing”, *International Journal of Human Resource Management*, 17[2], 245-264, 2006.
- [COL 90] COLEMAN J.S., *Foundations of Social Theory*, Harvard University Press, Cambridge (Mass.), 1990.
- [CUM 03] CUMMINGS J.N., *Work Groups, Structural Diversity and KS in a Global Organisation*, PhD Thesis, Carnegie Mellon University, 2003.
- [FAN 05] FANG Sh.-Ch. and TSAI F.-Sh., “Knowledge sharing routines, task efficiency, and team service quality in instant service-giving setting”, *The Journal of American Academy of Business*, 6[1], 62-67, 2005.
- [GRÜ 00] GRÜEN T., SUMMERS J.O. and ACITO F., “Relationship marketing activities, commitment, and membership behaviors in professional associations”, *Journal of Marketing*, 64[3], 34-49, 2000.
- [GRU 00] GRUNDSTEIN M., “From capitalizing on company knowledge to knowledge management”, in D. Morey, M. Maybury, B. Thuraingham (eds.), *Knowledge Management, Classic and Contemporary Works*. MIT Press: Cambridge, Massachusetts, 2000.
- [HAN 06] HANSEN M.T., MORS M.L. and LÖVÅS B., “Knowledge sharing in organisations: multiple networks, multiple phases”, *Academy of Management Journal*, 48[5], 776-793, 2006.
- [HAS 04] HASLAM S.A., *Psychology in Organisations. The Social Identity Approach*, SAGE Publications: London, Thousand Oaks, New Delhi, 2004.
- [HIS 02] HISLOP D., “Mission impossible? Communicating and sharing knowledge via information technology”, *J. of Information Technology*, 17, 165-177, 2002.

- [HJO 03] HJØLLUND L. and SVENDSEN G.T., "Social capital: a standard method of measurement", in H. Flap and B. Völker (eds.), *Creation and Returns of Social Capital*. London: Routledge, 2003.
- [INK 00] INKPEN A.C., "Learning through joint ventures: a framework of knowledge acquisition", *Journal of Management Studies*, 37, 1019-1043, 2000.
- [KRI 00] KRISHNA A. and SHRADER E., "Cross-cultural measures of social capital: a tool and results from India and Panama", *Social Capital Working Paper Series*, World Bank, 2000.
- [LEV 04] LEVIN D.Z. and CROSS R., "The strength of weak ties you can trust: the mediating role of trust in effective knowledge transfer", *Management Sciences*, 50[11], 1477-1490, 2004.
- [LIA 04] LIAO S.H., CHANG J.C., CHENG S.C. and KUO C.M., "Employee relationship and knowledge sharing: a case study of a Taiwanese finance and securities firm", *Knowledge Management Research and Practice*, 2[1], 24-34, 2004.
- [MAR 05] MARSHAL R.S., NGUYEN T.V. and BRYANT S.E., "A dynamic model of trust development and knowledge sharing in strategic alliances", *Journal of General Management*, 31[1], 41-57, 2005.
- [MAY 95] MAYER R.C., DAVIS J.H. and SCHOORMAN F.D., "An integrated model of organizational trust", *Academy of Management Review*, 20[3], 709-734, 1995.
- [MCE 03] MCEVILY B., PERRONE V. and ZAHEER A., "Trust as an organizing principle", *Organization Science*, 14[1], 91-103, 2003.
- [MOL 00] MOLM L.D., TAKAHASHI N. and PETERSON G., "Risk and trust in social exchange: an experimental test of a classical proposition", *American Journal of Sociology*, 105[5], 1396-1427, 2000.
- [NAR 01] NARAYAN D. and CASSIDY M.F., "A Dimensional approach to measuring social capital: development and validation of a social capital inventory", *Current Sociology*, March 2001, 59-102, 2001.
- [NOT 07] NOTEBOOM B., "Social capital, institutions and trust", *Review of Social Economy*, LXV[1], 29-53, 2007.
- [POL 75] POLYANI M., "Personal knowledge", in M. Polyani and H. Prosch (eds.), *Meaning*, University of Chacago Press, Chicago, 1975.
- [ROU 98] ROUSSEAU D.M., SITKIN S.B., BURT R.S. and CAMERER C., "Not so different after all: a cross-discipline view of trust", *Academy of Management Review*, 23[3], 393-404, 1998.
- [SCO 01] SCOTT J., *Social Network Analysis*, Sage Publications: London, Thousand Oaks, New Delhi, 2001.
- [SHE 53] SHERIF M., SHERIF C.W., *Groups in Harmony and Tension*, New York: Harper, 1953.
- [SMA 05] SMALL C.T. and SAGE A.P., "Knowledge management and knowledge sharing: a review", *Information Knowledge Systems Management*, 5, 153-169, 2005.
- [SOE 03] SOEKIJAD M. and ANDRIESEN E., "Conditions for KS in competitive alliances", *European Management Journal*, 21[5], 578-587, 2003.

[ZAK 04] ZAKARIA N., AMELINCK A. and WILEMON D., “Working together apart? Building a knowledge-sharing culture for global virtual teams”, *Creativity and Innovation Management*, 13[1], 15-29, 2004.