NETWORKING BETWEEN OCCUPATIONAL HEALTH SERVICES, CLIENT ENTERPRISES AND OTHER EXPERTS: DIFFICULTIES, SUPPORTING FACTORS AND BENEFITS

PÄIVI PELTOMÄKI and KAJ HUSMAN

Department of Research and Development in Occupational Health Services
Finnish Institute of Occupational Health
Helsinki, Finland

Abstract. This study explores difficulties, supporting factors and benefits of networking to studied enterprises and other network partners (focus on OHS and client enterprises). The study also explores social capital as a resource produced in network relations, and trust as a core dimension of social capital, and trust as a binding element in networking. The study is a mixed methods research (both qualitative and quantitative research materials). The most important supporting factors were: committed and active focus person, teamwork skills, long relationships, familiarity, trust and two-way communication in co-operation, shared goals, norms and values, an equal cost and benefit ratio, and the high quality of services. The biggest problems were the lack of skills to operate in the network and difficulties in maintaining the network, weak communication, lack of confidence, inconvenient size or composition of the network, overlapping information, cliques, nodes and missing links. The benefits were versatile: knowledge and skills accumulate, the network multiplies resources, fluency of co-operation, innovations, commitment and trust increase, good practices expand, and moreover, the quality, many-sidedness and appropriateness of operations improve. Networking is beneficial but demanding. There are many limitations. Networks are not equal for every network partner (inequality in cost and benefit ratio). Networks produce social capital for participants. Successful networking requires trust relations between network partners.

Key words: Network, Trust, Social capital, Occupational health services, Mixed methods, Case study

INTRODUCTION

What kind of new developments in working life describes European and western world today? Globalization, information and communication technology (ICT), customer’s high quality demands, reduction of face to face contacts in communication and importance of competence and social relations are some of them [1,2]. All of these developments create need for networking, trust formations in relations, and social capital as a resource producing competitiveness, success and different forms of advantages [3–6]. It is important to find out what these concepts are and how they can be created and utilized.

In Finland, occupational health services (OHS) are based on the Occupational Health Service Act of 1978 (amended in 1991 and 2002). The employer is obligated by law to organize occupational health services for the employees. The employer is reimbursed half of the OHS costs from the Social Insurance Institution. The OHS must contain at least preventive services, but also curative services are
available. There are four different OHS providers: municipal health care centers, OHS units of enterprises, private medical centres, and a joint model of OHS units. Altogether, there were 1087 OHS units and 5400 OH posts in 1998; 75% of the employed labor force, and 86% of the salaried employees and wage-earners are covered by OHS. Those without OHS are mainly self-employed persons and very small enterprises [7].

The aims of OHS are a healthy and safe work environment, a well functioning work community, the prevention of work-related diseases, and the maintenance and promotion of the work ability of employees [8]. OHS are functional and well-covering service system in Finland in the field of occupational health and safety. However effectiveness and benefits of OHS greatly depend on relations and communication between a OHS and clients.

The main theoretical concepts of this study are networks, social capital, and trust. There are many definitions of social capital, networks and trust, and the use of these concepts vary a great deal [9–11]. All of these are tied together. Networks are constructed of relationships and connections between people, stakeholders, experts, enterprises, OHS units etc. [12–14]. Social capital can be seen as a resource produced in these relations [15–17]. Trust is a core dimension of social capital and trust is also binding element: networks cannot exist, operate and produce social capital without trust [18,19].

The aim of this study was to explore the difficulties and the supporting factors in networking between OHS, client enterprises, other experts and service system’s professionals. The second goal was also to find out the benefits of networking for the participants. The third goal was to examine social capital produced in the networks, and to investigate how trust or its non-appearance affects the functioning of the networks.

**MATERIALS AND METHODS**

Methodologically, this is a study of mixed methods. The empirical material is a combination of quantitative and qualitative research material [20]. It is part of two large surveys, part of network data, and part of the thematic interview data. Surveys have also been conducted on the general background. They represent the prevailing situation concerning the investigated matters in Finland from 1998 to 2001. The cases deepen and specify the survey results and information. They describe more precisely the processes, operations, logic of functioning, and the ways of acting in the study enterprises. The case material provides some answers to the questions of how and why networking has succeeded or failed.

In this study the primary empirical material consists of computer-assisted telephone interviews (in 1998 and 2001, six interviews, lasting on average 40 min), network interviews (in 2000, six interviews), thematic in-depth interviews (in 2000, six interviews, lasting on average 1.5–2 h), documents (annual reports, budgets, personnel accountings, etc.), and also surveys (in 1998 and 2001, more than 800 workplaces and more than 2200 interviews in both, lasting on average 40 min) as generalized background data. Representatives of the management, employees, and occupational health staff have been interviewed. Both quantitative analysis methods (network analysis, statistical frequencies, cross-tabulations and correlations), and qualitative analysis methods (classification analysis) have been used.

In the case study, good selection criteria are for example to select as good and as poor cases as possible (extreme cases) [21]. That is how we did the discretionary selection in this study. In the first case the relation between the client enterprise and OHS was good and active. In the second case it almost did not exist, there were only statutory minimal connections. The development of the enterprise’s activities and promotion of the employees’ well-being were versatile and more active in the first enterprise than in the second one.

This is a case study of two large and growing information technology (IT) enterprises and their OHS providers. Also other network partners taking part in prevention, and in the development of enterprise activities, and in the promotion of employees' well-being have been found out. The main focus is on OHS in the client enterprise’s network. This is also a follow-up study covering the years
from 1998 to 2001. The surveillance continues, so findings are therefore partly provisional.

Exploratory IT enterprises are high-value-added IT service providers. The first enterprise has 10 000 employees (5000 in Finland) and it is almost 30 years old. The second one has 8200 employees (400 in the study unit), and it is 15 years old. Both enterprises have encountered many buyouts. Both are multinational and operate in many countries and in many cities of Finland. This study is restricted to the Finnish branches of the enterprises. The bigger enterprise has its own OHS unit, while a private medical center is a OHS provider for the other one.

RESULTS

According to this study, networking requires co-operation and teamwork skills. The most important necessity for a functioning and effective network is a committed and active focus person. Long relationships, familiarity, trust and two-way communication in co-operation improves networking. Shared goals, norms and values, an equal cost and benefit ratio, and the high quality of services also support the network (Table 1).

Problems in communication, lack of confidence, inconvenient size or composition of the network, overlapping information, cliques, nodes and missing links disturb networking. The biggest problems are the lack of skills to operate in the network and difficulties in maintaining the network (Table 2).

The experienced/assessed benefits of networking are versatile: knowledge and skills accumulate, the network multiplies resources, fluency of co-operation, innovations, commitment and trust increase, good practices expand, and moreover, the quality, many-sidedness and appropriateness of operations improve (Table 3).

The networking succeeded better and the benefits were greater in the first case. This concerned especially the relations between the client enterprise and the OHS provider. There were big problems in both cases because traditional OHS practices and procedures do not serve the IT enterprises properly. The OHS personnel do not have necessary tools and means. But in the first case they did their best and were willing to continue trying to create a connection to the client. OHS succeeded in convincing the client that the OHS are a profitable network partner. But a common language and way of working together were still missing. The OHS staff was active in trying to search for a common contact surface with the client enterprise. OHS were one of the core participants in the enterprise network (Table 4).

In the second case OHS had given up. Common language and understanding and appropriate tools were not found. The OHS had decided to carry out only the legal minimum with the client. The client enterprise did not regard

<table>
<thead>
<tr>
<th>Supporting factors of networking</th>
<th>Experienced/assessed good success in networking</th>
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<tr>
<td>Teamwork skills</td>
<td>**</td>
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<tr>
<td>Committed and active focus person</td>
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<tr>
<td>Long relationship</td>
<td>*</td>
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<tr>
<td>Familiarity</td>
<td>*</td>
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<tr>
<td>Trust</td>
<td>**</td>
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<tr>
<td>Reciprocity</td>
<td>**</td>
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<tr>
<td>Two-way communication</td>
<td>*</td>
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<tr>
<td>Shared goals, norms and values</td>
<td>**</td>
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<tr>
<td>High quality of services</td>
<td>*</td>
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<tr>
<td>Equal cost and benefit ratio</td>
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</tbody>
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*p < 0.05; ** p < 0.01; *** p < 0.001.
OHS as useful network partner and did not understand the surplus value of OHS, which was seen only as an extra expense. There was no proper communication, cooperation or relations. OHS were an outsider in the enterprise network: network position of OHS was in the external circle (Table 4).

One of the reasons for differences in relations between the enterprises and their OHS units can be that the study enterprises are in different phase/stage. The first one is a parent enterprise with many enterprises incorporated in it. The second one has been bought by a bigger enterprise, so there has been much more readjustment and break-up in it. The attention is focused on primary processes like production and work. Also the economic situation is now better in the first enterprise than in the second one. But it was almost equal in both enterprises when this follow-up study started.

Selection of suitable collaboration partners (proper composition of the network), in relation to the goals of the network, is important. The appropriateness of the expert partners affects the success of the network. The OHS units (physicians and nurses) collaborate often, not only with physiotherapists and psychologists, but also with occupational hygienists, construction engineers, opticians and dieticians. All of these experts are named in the OHS law as experts with whom the OHS personnel are expected to collaborate with. In this study the network partners were in addition to the OHS provider and the enterprises’ intra-participants (representatives of the management, personnel administration, industrial safety organization, and shop stewards), rehabilitation institutions, physical training centers, and physical therapy institutions, Social Insurance Institution, education centers, management training centers, work community consultants, research

**Table 2. Factors causing harm in networking which correlate positively and significantly experienced/assessed failure in networking**

<table>
<thead>
<tr>
<th>Factors causing harm in networking</th>
<th>Experienced /assessed failure in networking</th>
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<tbody>
<tr>
<td>Problems in communication</td>
<td>*</td>
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<tr>
<td>Lack of confidence</td>
<td>**</td>
</tr>
<tr>
<td>Inconvenient size or composition of network</td>
<td>***</td>
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<tr>
<td>Overlapping information</td>
<td>*</td>
</tr>
<tr>
<td>Cliques and nodes</td>
<td>***</td>
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<tr>
<td>Missing links</td>
<td>**</td>
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<tr>
<td>Lack of skills to operate in network</td>
<td>***</td>
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<tr>
<td>Difficulties in maintaining network</td>
<td>***</td>
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<tr>
<td>Lack of suitable methods, means and tools to fulfill clients’ needs</td>
<td>**</td>
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</tbody>
</table>

*p < 0.05; ** *p < 0.01; *** *p < 0.001.

**Table 3. Experienced/assessed benefits of networking to OHS, client enterprises and other experts. Interviews of OHS, employer and employees**

<table>
<thead>
<tr>
<th>Experienced/assessed benefits of networking</th>
</tr>
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<tbody>
<tr>
<td>Knowledge and skills accumulate</td>
</tr>
<tr>
<td>Network multiplies resources</td>
</tr>
<tr>
<td>Fluency of co-operation improves</td>
</tr>
<tr>
<td>Commitment increase</td>
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<tr>
<td>Innovations increase</td>
</tr>
<tr>
<td>Trust strengthens</td>
</tr>
<tr>
<td>Good practises expand</td>
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<tr>
<td>Quality, many-sidedness and appropriateness of operations improve</td>
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</table>

**Table 4. Main differences between studied IT enterprise cases**

<table>
<thead>
<tr>
<th>Compared factors</th>
<th>Case I</th>
<th>Case II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relations, communication</td>
<td>Active</td>
<td>Passive</td>
</tr>
<tr>
<td>Development activities</td>
<td>Versatile</td>
<td>Slight</td>
</tr>
<tr>
<td>Role of OHS</td>
<td>Active, important</td>
<td>Passive, weak</td>
</tr>
<tr>
<td>Network position of OHS</td>
<td>Core</td>
<td>External</td>
</tr>
<tr>
<td>Composition of network (compared to goal of network)</td>
<td>Better</td>
<td>Worse</td>
</tr>
<tr>
<td>Cliques and nodes</td>
<td>More</td>
<td>Less</td>
</tr>
<tr>
<td>Benefits of networking</td>
<td>More</td>
<td>Less</td>
</tr>
</tbody>
</table>

Comparing factors: OHS as useful network partner and did not understand the surplus value of OHS, which was seen only as an extra expense. There was no proper communication, cooperation or relations. OHS were an outsider in the enterprise network: network position of OHS was in the external circle (Table 4).
networks are not simply to define and perceive [26]. Social capital is difficult to measure and define [27]. It is the surplus value produced by the network, and it does not exist without the network. Good example of this is the new ways of outlining and solving issues and problems created by networking [28]. Trust is very important but remarkably fragile and vacillating [29]. It is hard to build but even more awkward to build back once it has broken down [30]. Trust helps in the functioning of the network, it saves time and increases convenience in co-operation [31]. Non-appearance of trust is reflected in the network as cliques, nodes and selfishness [32,33].

It takes a lot of effort to create a stable, lively and fluently operating network. The problem is that trust in the network and the functioning of the network are often adhered to individuals, not to the organizations they represent. If such a trusted person leaves the network, it really disturbs the networking. This makes networks more unstable and vulnerable [34,35].

The character of the network is both strength and weakness. They are flexible and they can react quite quickly to changes in the operating environment. It is easier to add and remove participants in a network than in many other structures or coalitions, because networks are informal, voluntary and dynamic formations. But they are also unsteady and hard to maintain as well-functioning formations. It requires time, commitment and patience to maintain a network [36,37]. The maintainer, the heart of the network, is often the participant who gets the most advantages from the networking.

It is not simple to define the boundaries of the network. The structure of network is like an ameba [9]. The focus, the center of the network is easy to perceive. It is quite stable and well trusted. Otherwise the network collapses. The external circle of network is more changeable: the participants there vary more often than central participants. The external circle of the network is difficult to perceive. But it also brings liveliness and turnover to the network.

The network is a formation or structure in which a group of otherwise unconnected experts create relations in order to reach their objectives. The objectives are not the same for everyone, but they cannot be so contrary that they
hamper each other. The participants of the network profit from each other in reaching their own goals. However, the inequality in cost and benefit ratio can be a problem in networking. One participant gets more output than the other compared to their inputs and investments to the network. Network can even be harmful to somebody, but often they are those who are outsiders. If the trust between the participants is weak, everybody guards their own advantages jealously, and it disturbs networking [19, 38,39]. If its own resources are insufficient (small OHS units, small enterprises, or operations which need multiple expertise) networking multiplies them and is especially profitable. It is beneficial for all participants to operate in networks [23]. The appropriate composition, size, structure and goals of the network are very important. This ensures optimization of the benefits in network operations [36,40–43].

REFERENCES


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