

## **COST IN COOPERATIVE LEADERSHIP: THE NETWORK APPROACH AS AN ORGANISING STRATEGY FOR THE EXCESSIVE FLOW OF INFORMATION IN INSTITUTIONS<sup>1</sup>**

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### **Abstract**

The main purpose in this study is to produce strategies with the purpose of reducing excessive information and work load in educational institutions as a cost of cooperative leadership. In line with this main purpose, the answers to the following questions have been sought for in the study: In the analyzed group (1) is there a problem of excessive information and work load? (2) What are the key actors for excessive information and work load? (3) Which precautions can be taken for the solution of problems identified in the management of networks? Method: This study in the survey model has been conducted at the Directorate of Educational Inspectors affiliated to the ministry of Education of a mid-scale city in 2015 through the social network analysis approach. In the analysis group consisting of a chairman and four groups which work dependently on the chairman, where each group has three inspectors each, there are 13 educational inspectors. Nine (9) participants have supported the study. Social network analysis used in the study is an interdisciplinary study approach which has unique measurements in terms of identifying the relationships between inter-actors. It allows actors and relationships between inter-actors and the structure formed by these relationships to be digitized or put forward in the form of graphics. A contemporary social network analysis carries these basic characteristics: (i) it justifies the insights in terms of structural connections which connect social actors with one another; (ii) this empirical data is collected systematically and is controlled; (iii) this data is presented through graphics and (iv) in these calculations, mathematical models are relied on. In the study, the main data of the analysis has been collected through the semi-structured interview method. The participants have been asked to note their interviews related to subjects on their duties within one work day (number and person) using the tally method on the form prepared to collect data. It has been asked to eliminate interviews with personal content, which do not facilitate the conduct of the study and do not carry informative value. Data collected from a total of 9 participants have been analyzed with UCINET 6.0 which is the software program used for Social Network Analysis and values of density, degree and betweenness which are unique calculations to social network analysis have been calculated and the network relationships have been presented visually in the graphics. Results: According to the findings of the study, interviews which take up the most time in the participants' daily work and do not facilitate their work and do not carry informative value are of a higher rate (65%). In addition to this, some participants (5, 2, 1) within the group in the network assume a more critical role in terms of information flow. It has been determined that investigation duties accumulate on certain participants and that these considerably slow down duties and create pressure on participants. This situation has been presented visually as well through the formation of network maps.

**Key Words:** Cooperative leadership, network approach, organizing strategy, social network analysis, inspector.

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## INTRODUCTION

The rapid social, economic, political and technological developments in the world have also transformed organizations. Strict bureaucratic and vertical organizational structures where the authorities are concentrated at the top have gradually been replaced by new organizational structures that are flatter (horizontal), more flexible and have more permeable borders (network type) (Hatch, 1997; Castells, 2008). This situation has affected the management styles of the people who make up the organizations as well as the structural dimensions of the organizations. Leadership, which can be explained as the ability to influence people to achieve a common goal, is referred to with many different types such as authoritarian, charismatic, transformational, traditional, ethical, cultural, situational, and visionary (Wheatley, 1992; Empson, 2017).

When the leadership approaches are grouped with a broader perspective, it is possible to examine them by dividing them into two groups as traditional and cooperative leadership. Traditional leader, empowered by authority; strictly adheres to certain duties and responsibilities and does not go out of these patterns; who share the information they have with a limited amount; that distributes time and resources in certain periods; offering ready-made solutions to the apparent problems without going to the root of the problems encountered in the organization; It draws a profile that occasionally listens to the ideas and suggestions of its subordinates and evaluates the performance of its subordinates, generally in line with the policies of the organization, on an annual basis. The cooperative leader, on the other hand, gets his strength from his teams, does not just stick to certain patterns, he is ready to develop and change. To make a definition in this context, cooperative leadership can be explained as a leadership approach that helps employees in the organization to interact and cooperate with each other (Grint, 2005; Empson, 2017). Recent studies on cooperative leadership have shown that it can leverage not only insider but also outside ideas and connect these ideas with those inside the organization (open innovation), leverage various talents (talent management), model high-level collaborative behaviors, and make use of these discussions when necessary in team discussions. argues that those who can interfere with taking too much time have cooperative leadership characteristics.

The cooperative leadership approach focuses on distributing the power of a team from a single leader and involving everyone in the decision-making process. Controlling and managing a team from a position of strength makes those working under them feel powerless. This causes them to be reluctant to offer their opinions because they know they will not be valued. Collaborative cultures make everyone feel like they can have a say in the direction of the project. Instead of blindly taking instructions from one person, everyone can work together to solve problems. As it is seen, the actions of the cooperative leader include the interaction processes that require the information flow in the organization to be versatile, multi-channel and fast, and to share a lot of information (Harper, 2012). The management of such an organizational structure is tried to be realized by using strategies such as the introduction of collaborative technologies, the establishment of new practice communities or teams, different from traditional understandings.

If the organization is considered as a network structure formed by cooperation relations between individuals who have come together for common goals and purposes, each formal and informal relationship and each managerial practice will reveal new patterns of information sharing (Krackhardt and Hanson, 1993; Cross and Cummings, 2004). Supporting information sharing and interaction, without making any discrimination between them, and making continuous connection-creating initiatives leave managers and employees with an insurmountable data load after a while. This is an indication that cooperation, which is mostly characterized by a positive perspective, also has a cost. In solution proposals to reduce cooperation costs, it is generally recommended to take a more targeted approach in network relations.

The network approach, which is the subject of this study, can be used as an effective strategy in reducing the cost of cooperation with its different perspective. Managers who target strategic points in social networks can increase the effectiveness, efficiency and innovation opportunities of the organization more rapidly. According to the network approach, it is not possible and not desirable for everyone to be connected with everyone, regardless of the size of the organization, especially as the size of the organization increases. An excessive increase in connections can become a barrier to productivity. Researches show that while middle-level managers are under more intense connections and workload in relations with subordinates, top-level managers are less

aware of daily practices and their accessibility decreases as they climb up the organizational levels (Kilduff and Tsai, 2007; Barabasi, 2010; Christakis and Fowler, 2012).

This situation can also be explained by the increase in external connections of senior managers. One of the critical benefits of network analysis is to provide a holistic perspective by enabling the organization to see the differences between formal and informal structure, to identify key points. Another benefit of the network approach is that it often reveals the presence of extreme relationships. This approach can enable managers/leaders in the organization to find ways to alleviate the burden of employees under excessive information and workload and to reduce time-consuming connections. When looking at various studies, the important network relations that can be examined in the analysis of organizations with the network approach, showing the cooperation within the network (communication, information, problem solving, innovation), showing the information sharing potential of the networks (information awareness, access, participation, safety), showing the rigidity of the network (decision). giving, more communication, task flow, influence) and relationships that show well-being and solidarity within the network (likeness, career support, personal support, energy, trust) (Tichy, Tushman and Fombrun, 1979; Krackhardt and Hanson, 1993; Monge and Contractor; 2001; Waldstrom, 2001; Kilduff and Tsai, 2007; Cross and Parker, 2004; Eren, 2019).

Educational organizations are organizations with stronger informal aspects compared to other organizations. Within the universe educational organizations selected in this research, the responsibility areas are quite large. Education inspectors are responsible for the supervision of various educational organizations in the whole province, the vocational guidance of employees (teachers, administrators) and their investigation when necessary. In this context, it is possible that education inspectors, whose areas of responsibility are quite wide and whose number is quite limited throughout the country, are under an excessive information load.

Hunter (2015) evaluated organizational analysis research in two main streams. In the first, the formal structure of the organization was emphasized. This perspective, which represents traditional research, focuses on the hierarchical pattern of authority relations that changes in measurable structural dimensions such as centralization, formalization, vertical and horizontal differentiation, scope of control and specialization. Second, it examines the behavior of the unit, department and employees in the organization by considering their relations with each other. While the first of these is carried out with traditional research approaches, the second consists of research conducted with the social network perspective, which is explained in detail later. Revealing and understanding this structure requires very different approaches and techniques than the other. Regardless of the method of analysis or the underlying factors, what is evident is that no organization can be satisfactorily described using the organizational chart alone (Waldstrom, 2001).

**Table 1.** Types and Contents of Relationships in the Analysis of Informal Organizational Structures

Researchers	Relationship Types	Relationship Contents
Tichy and Tushman (1979)	-Technical -Political -Cultural	Technical approach: related issues, Political approach: individual and group goals; Cultural approach: implicit, implied and deeper meanings and shared values within the organization.
Monge and Contractor (2001)	-Related to production -Innovator - For protection	Production-related messages: the relations established during the execution of a particular job and for the related needs, and the messages sent in this context. Innovation messages: organizational problem solving and improving the way things are done. Protection messages: messages in content arising from social and psychological needs.
Ibarra (1992)	-Instrumental relations -Close personal relationships	Instrumental relationships: everyday relationships based on short-term goals. Close personal relationships: authority relationships based on power and influence
Krackhardt and Hanson (1993)	-Suggestion -Confidence -Communication	Suggestion networks: those with technical or professional strength in the organization. Trust relationships: bonds of friendship and love. Network: the general information flow in the organization.
Waldstrom (2001)	-Influence, -Political	Influence: friendship, trust, and intimate close relationships. Production: suggestion, exchange of

	-Production -Cultural	instrumental and technical knowledge, and innovation. Political: influence, power and authority. Cultural: communication and information flow type relationships.
Borgatti, Everett and Freeman (1999), Kilduff and Tsai (2003), Cross and Parker (2004)	-Partnership, -Information, -Relationships showing rigidity -Well-being and solidarity relations	Collaboration: communication, knowledge sharing, problem solving and invention. Relationships demonstrating the potential to share information: knowledge awareness, access to knowledge and each other, participation, and trust-type relationships. Relationships showing rigidity in networks: decision making, leadership, communication density, task flow, and influence. Relationships that show well-being and solidarity in the organization: relationships of enjoyment, friendship, career support, personal support, energy and trust.

Source: Eren, 2019, 1124, Table 2.

The necessity of a special approach in examining informal relationships has been expressed by many researchers. Hanneman (1987) argued that social actions consisting of complex dynamic processes created by more than one social actor are not affected by a single factor and have more complex dynamics. The dynamic relations structure, which is formed as a result of non-linear relations and changes rapidly, cannot be disassembled and analyzed with the reductionist approach of the positivist paradigm. New approaches emerging in this context reveal new tools and perspectives to analyze the complexity of organizations (Öztaş and Acar, 2004; Eren, 2019, 1124). Despite all their limitations, network-based approaches have a great contribution in revealing the informal organization and analyzing various relationships. It is only possible for organizations to cope with uncertainties and to survive in the face of both their own complexity and the uncertainties coming from their environment, only by understanding the patterns of system dynamics (Senge, 1990; Cross and Cummings, 2004; Cross, Dickman, Newman-Gonchar ve Fagan, 2009).

### Objective

The main purpose in this study is to produce strategies with the purpose of reducing excessive information and work load in educational institutions as a cost of cooperative leadership. In line with this main purpose, the answers to the following questions have been sought for in the study: In the analyzed group:

- 1- Is there a problem of excessive information?
- 2- What are the key actors for excessive information?
- 3- Which precautions can be taken for the solution of problems identified in the management of networks?

### METHOD

Under this title, the research model of the study, the research population, participants, collection of data and processes in relation to their analysis are included.

### Research Model

The study is the survey model which involves determining the existing situation. The survey model is a research approach which describes a situation which exists at that moment as it is and aims at defining it. The study has been conducted with the social network analysis approach. Social network analysis is an interdisciplinary research approach which has unique calculation methods in terms of revealing the relationships between the actors. It allows the structure formed by the relationships between the actors and inter-actors and these relationships in a digitalized manner or in the form of graphics (Aggarwal, 2011; Sparrowe, Liden, Wayne and Kraimer, 2001). Social network analysis (SNA) is a unique methodology with its own version of data collection, statistical analysis, and presentation of the results (Kapucu, Yuldashev, Demiroz and Arslan, 2010, 541). According to Freeman (2004, 2) these aspects are a part of all modern social network analysis examples. Social network analysis justifies the insights on the structural connections which tie social actors to each other. This empirical data is collected systematically and it is controlled. This data is presented through graphics. Mathematical models are relied on in the making of these calculations.

**Population and Sample**

This study in the survey model has been conducted at the Directorate of Educational Inspectors affiliated to the ministry of Education of a mid-scale city in 2015 through the social network analysis approach. In the analysis group consisting of a chairman and four groups which work dependently on the chairman, where each group has three inspectors each, there are 13 educational inspectors. Nine (9) participants have supported the study (Table 2).

**Table 2.** Demographic Information on Study Participants

ID	Gender	Age	Position	Groups
1	Male	48	Education Inspector	Group 1
2	Male	47	Education Inspector	Group 1
3	Male	43	Education Inspector	Group 1
4	Male	58	Education Inspector	Group 2
5	Male	42	Education Inspector	Group 2
6	Female	49	Education Inspector	Group 3
7	Male	39	Education Inspector	Group 3
8	Female	47	Education Inspector	Group 4
9	Female	46	Education Inspector	Group 4

As seen in Table 2, three of the inspectors participating in the research were female and six were male; age ranges vary between 38-58; All are education inspectors.

**Data Collection and Analysis**

Social network analysis used in the study is an interdisciplinary study approach which has unique measurements in terms of identifying the relationships between inter-actors. It allows actors and relationships between inter-actors and the structure formed by these relationships to be digitized or put forward in the form of graphics. In the study, the main data of the analysis has been collected through the semi-structured interview method. The participants have been asked to note their interviews related to subjects on their duties within one work day (number and person) using the tally method on the form prepared to collect data. It has been asked to eliminate interviews with personal content, which do not facilitate the conduct of the study and do not carry informative value. Data collected from a total of 9 participants have been analyzed with UCINET 6.59 (Borgatti, Everett and Freeman, 2002) which is the software program used for Social Network Analysis and values of density, degree and betweenness which are unique calculations to social network analysis have been calculated and the network relationships have been presented visually in the graphics. Some metrics used in social network analysis researches and their definitions are given below (Table 3).

**Table 3.** Typical Social Network Measures Used to Describe Entire Networks

Measure	Definition
Size	Number of actors in the network
Inclusiveness	Total number of actors in a network minus the number of isolated actors (not connected to any other actors). Also measured as the ratio of connected actors to the total number of actors.
Component	Largest connected subset of network nodes and links. All nodes in the component are connected (either direct or indirect links) and no nodes have links to nodes outside the component.
Connectivity (Reachability)	Extent to which actors in the network are linked to one another by direct or indirect ties. Sometimes measured by the maximum, or average, path distance between any two actors in the network.
Connectedness	Ratio of pairs of nodes that are mutually reachable to total number of pairs of nodes
Density	Ratio of the number of actual links to the number of possible links in the network.
Centralization	Difference between the centrality scores of the most central actor and those of other actors in a network is calculated, and used to form ratio of the actual sum of the differences to the maximum sum of the differences
Symmetry	Ratio of number of symmetric to asymmetric links (or to total number of links) in a network.



Transitivity	Three actors (A, B, C) are transitive if whenever A is linked to B and B is linked to C, then C is linked to A. Transitivity is the number of transitive triples divided by the number of potential transitive triples (number of paths of length 2).
Centrality	This measure gives a rough indication of the social power of a node based on how well they "connect" the network. "Betweenness", "Closeness", and "Degree" are all measures of centrality.
Betweenness	The extent to which a node lies between other nodes in the network. This measure takes into account the connectivity of the node's neighbors, giving a higher value for nodes which bridge clusters. The measure reflects the number of people who a person is connecting indirectly through their direct links
Bridge	An edge is said to be a bridge if deleting it would cause its endpoints to lie in different components of a graph.
Closeness	The degree an individual is near all other individuals in a network (directly or indirectly). It reflects the ability to access information through the "grapevine" of network members. Thus, closeness is the inverse of the sum of the shortest distances between each individual and every other person in the network.
Degree	The count of the number of ties to other actors in the network. See also degree (graph theory). (Individual-level)
Eigenvector centrality	A measure of the importance of a node in a network. It assigns relative scores to all nodes in the network based on the principle that connections to nodes having a high score contribute more to the score of the node in question.

Source: Adapted from Scott, 2000; Sparrowe, Liden, Wayne and Kraimer, 2001; Eren, 2019; Eren and Kiral, 2018.

A contemporary social network analysis carries these basic characteristics: (1) it justifies the insights in terms of structural connections which connect social actors with one another; (2) this empirical data is collected systematically and is controlled; (3) this data is presented through graphics and (4) in these calculations, mathematical models are relied on (Freeman, 2004). After the data collected in the research were analyzed according to social network analysis measurements, the following findings were reached.

## FINDINGS

### Findings on Excessive Information

In the study, education inspectors were asked to record how many interviews were made in a day to determine the information flows among themselves. The recorded interview numbers were recorded in the information flow table. In addition, these interviews were marked as necessary and unnecessary. A daily information flow chart of education inspectors is given in Table 4.

**Table 4.** Information Flows Charts of Education Inspectors (Day)

	ID_1	ID_2	ID_3	ID_4	ID_5	ID_6	ID_7	ID_8	ID_9	Neces. +	Unnec. -	Total	
ID_1	0	8	5	12	0	3	6	0	6	14	26	40	
ID_2	3	0	7	5	6	0	8	0	5	12	22	34	
ID_3	3	3	0	0	5	3	15	10	12	18	33	51	
ID_4	0	15	12	0	7	0	0	2	7	15	28	43	
ID_5	3	9	0	5	0	0	0	4	7	10	18	28	
ID_6	0	0	8	5	7	0	1	5	6	11	21	32	
ID_7	3	3	7	0	0	0	0	3	5	7	14	21	
ID_8	11	11	15	16	0	2	2	0	5	22	40	62	
ID_9	1	0	5	14	0	8	0	7	0	12	23	35	
										<b>Total</b>	121	225	346

As can be seen in Table 4, the total number of interviews of education inspectors with 9 other colleagues who participated in the research only within the inspection groups was found to be 346. Participants were asked to mark each interview as Necessary (+/positive) and Unnecessary (-/negative). After the classification, 35% (n:121)

of the participants' interviews with other colleagues were classified as necessary and 65% (n:225). Thus, the first question of the research was answered. Accordingly, it was found that most of the meetings that education inspectors had with their other colleagues in one day were considered unnecessary. Examples of direct quotations from the views of the participants are given below.

*"I have to have more conversations on issues that are not directly related to the job and the task. Guidance activities related to education and training remain limited. More meetings are held with bureaucrats." (ID\_6, Female, 49 age)*

*"In the past, when school inspections were conducted, we also had the opportunity to provide guidance with teachers during course inspections, at least partially. After the course inspections were abolished, they no longer had the opportunity to meet with teachers. Therefore, we did not have the opportunity to provide guidance to teachers. In recent years, our only duty is investigation and school and institution inspections." (ID\_2, Male, 47 age)*

According to social network analysis data in the research, 9 participants from 13 actor groups supported the research. According to the social network analysis data in the research, it was found that the information network of the inspectors consisted of 13 actors (node=13) and 47 connections (ties:47). Network maps were created and this situation was also revealed visually (Figure 1).

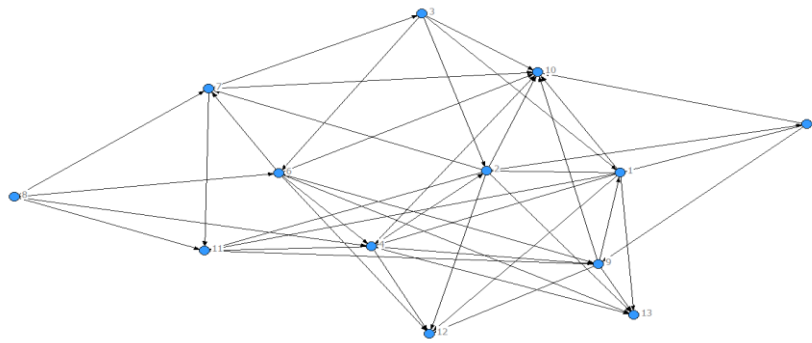


Figure 1. Network diagram of information flows of education inspectors.

According to the social network analysis research findings, according to the descriptive statistics of the inspector information flow network, the average of the network was  $\bar{X}=6.615$  ( $Sd=1.862$ ), the lowest degree was 4 (Minimum degree= 4,000), and the highest degree was 9 (Max degree=9.000). The descriptive statistics of the network are given in Table 5.

Table 5. Descriptive Statistics of Information Flows of Education Inspectors

	Degree	NrmDegree	Share
Mean	6.615	50.888	0.077
Std. Dev.	1.862	14.324	0.022
Sum	86.000	661.538	1.000
Variance	3.467	205.175	0.000
SSQ	614.000	36331.359	0.083
MCSSQ	45.077	2667.273	0.006
Euc Norm	24.779	190.608	0.288
Minimum	4.000	30.769	0.047
Maksimum	9.000	69.231	0.105
N of Obs	13.000	13.000	13.000

The centralization measure of the network was found to be 26.48% (Network Centralization = 23.48%, Blau Heterogeneity = 8.30% ; Normalized (IQV) = 0.66%).

**Findings on Key Actors of Excessive Information**

Centrality measures were used in the social network analysis to find the critical actors of the inspector information flow network (Table 6).

**Table 6.** Centrality Measures of Information Flows of Education Inspectors

ID	Degree	Betweenness	Closeness	Harmonic Closeness	Eigenvector
ID_1	9	4.791	15.000	10.500	0.352
ID_2	9	6.356	15.000	10.500	0.340
ID_3	5	0.583	19.000	8.500	0.219
ID_4	9	4.890	15.000	10.500	0.358
ID_5	4	0.143	21.000	7.833	0.190
ID_6	8	5.732	16.000	10.000	0.296
ID_7	6	2.298	18.000	9.000	0.226
ID_8	4	0.450	21.000	7.833	0.161
ID_9	8	3.739	16.000	10.000	0.319
ID_10	8	3.699	16.000	10.000	0.327
ID_11	6	2.366	18.000	9.000	0.250
ID_12	5	0.476	19.000	8.500	0.237
ID_13	5	0.476	19.000	8.500	0.237

The centralization measure of the network was found to be 26.48% (Network Centralization = 23.48%, Blau Heterogeneity = 8.30% ; Normalized (IQV) = 0.66%). Centrality measures were used in the social network analysis to find the critical actors of the inspector information flow network (Table 5). Seen in Table 5, the actors with the highest degree centrality were found to be ID\_1, ID\_2 and ID\_4.

*Degree centrality*, the count of the number of ties to other actors in the network (Scott, 2000; Sparrowe, Liden, Wayne and Kraimer, 2001; Eren, 2019; Eren and Kırıl, 2018). The actors with the highest degree centrality are those who have the most connections with others in the network. They are the actors who share the most information with other education inspectors. In the information flow table, the participants who shared and interacted with the others the most were found to be ID\_8, ID\_3, ID\_1 and ID\_4 (Table 6).

*Betweenness centrality*, the extent to which a node lies between other nodes in the network. This measure takes into account the connectivity of the node's neighbors, giving a higher value for nodes which bridge clusters. The measure reflects the number of people who a person is connecting indirectly through their direct links (Scott, 2000; Brass, 2003; Eren, 2019; Eren and Kırıl, 2018). The actors with the highest betweenness centrality are those who act as bridges due to the disconnection of others within the network. In this research, the actors acting as the highest bridge were found as ID\_2 and ID\_6.

*Closeness centrality*, the degree an individual is near all other individuals in a network (directly or indirectly). It reflects the ability to access information through the "grapevine" of network members. Thus, closeness is the inverse of the sum of the shortest distances between each individual and every other person in the network (Scott, 2000; Brass, 2003; Eren, 2019; Eren and Kırıl, 2018). In the research, the actors with the highest centrality of closeness were found to be ID\_5 and ID\_8. (Table 6).

*Eigenvector centrality*, a measure of the importance of a node in a network. It assigns relative scores to all nodes in the network based on the principle that connections to nodes having a high score contribute more to the score of the node in question (Scott, 2000; Brass, 2003; Eren, 2019; Eren and Kırıl, 2018). In other words, these actors are the most valuable actors of the information flow network of education inspectors. High-importance actors are those who have the power to influence and direct the network. In the research, the actors with the highest



eigenvector degree were found to be ID\_4, ID\_1 and ID\_2. In such research, the most critical actors of the network were found. Thus, the second question of the research was answered (Table 6).

### Findings on Problems and Suggestions for Solutions to Excessive Information

In the research, the participants were asked about the problems caused by excessive information and solution suggestions. According to the answers of the participants, the biggest problem created by excessive information is the waste of time (n: 9). After that, other problems were found to be problems in performing the tasks (n:8), creating personal problems (n:5) and causing health problems (n:2). Participants stated that this is generally due to cultural origin.

*“As a society, we are people who like to talk and chat with others during business hours. This is actually a good thing. However, when it is more than necessary, it creates a problem. I do not complain about having close relationships and communication with my colleagues. But there are those who come from outside especially to get information from us or for different reasons. These are the situations we have real trouble with. There may also be those who want to establish a dialogue in order to obtain information about the investigation processes or to try to influence them. They are the ones that should be seen as a problem.” (ID\_1).*

According to the participants, the reasons that cause more information overload than relations with colleagues are electronic correspondence from the institution, e-mails and organized meetings. In the study, the participants were also asked for solution suggestions. The solution suggestions of the participants are given in Table 7.

**Table 7.** Suggestions for Solutions to Excessive Information of Education Inspectors

Suggestions for Solutions	f	%
Preventing excessive use of e-mails	9	100
Providing trainings for effective use of time	7	77
Shortening meeting times	5	55
Establishing communication policies among employees	2	22
Providing staff support to share the overload of corporate correspondence	2	22

100% (n:9) of the participants of the research stated that excessive use of e-mail should be prevented, 77% (n:7) gave trainings for the effective and efficient use of time; 55% (n:5) suggested shortening the meeting times, 22% (n:2) suggested establishing communication policies among employees, and 22% (n:2) providing personnel support to share the burden of corporate correspondence.

## CONCLUSION

Excess information leads to information overload at both individual and organizational levels, impairing the ability of organizations and employees to do their jobs. In addition, organizations and individuals cannot use this information effectively due to excessive information and classification problems. Organizations and individuals cause instability in the system as a result of these inefficiencies and increase the likelihood of conflicts and inefficiency among individuals. The cooperative leadership approach focuses on distributing the power of a team from a single leader and involving everyone in the decision-making process. Controlling and managing a team from a position of strength makes those working under them feel powerless. This causes them to be reluctant to offer their opinions because they know they will not be valued. Collaborative cultures make everyone feel like they can have a say in the direction of the project. Instead of blindly taking instructions from one person, everyone can work together to solve problems. As it is seen, the actions of the cooperative leader include the interaction processes that require the information flow in the organization to be versatile, multi-channel and fast, and to share a lot of information (Harper, 2012). The management of such an organizational structure is tried to be realized by using strategies such as the introduction of collaborative technologies, the establishment of new practice communities or teams, different from traditional understandings.

The network approach, which is the subject of this study, can be used as an effective strategy in reducing the cost of cooperation with its different perspective. Managers who target strategic points in social networks can increase the effectiveness, efficiency and innovation opportunities of the organization more rapidly. According

to the network approach, it is not possible and not desirable for everyone to be connected with everyone, regardless of the size of the organization, especially as the size of the organization increases. An excessive increase in connections can become a barrier to productivity. Researches show that while middle-level managers are under more intense connections and workload in relations with subordinates, top-level managers are less aware of daily practices and their accessibility decreases as they climb up the organizational levels (Kilduff and Tsai, 2007; Barabasi, 2010; Christakis and Fowler, 2012).

In this research, the total number of interviews of education inspectors with 9 other colleagues who participated in the research only within the inspection groups was found to be 346. Participants were asked to mark each interview as Necessary (+/positive) and Unnecessary (-/negative). After the classification, 35% of the participants' interviews with other colleagues were classified as necessary and 65%. Accordingly, it was found that most of the meetings that education inspectors had with their other colleagues in one day were considered unnecessary. In such research, the most critical actors of the network were found. Thus, the second question of the research was answered. According to the participants, the reasons that cause more information overload than relations with colleagues are electronic correspondence from the institution, e-mails and organized meetings. Strategy is the beginning of organizational structure. Strategies to be implemented in organizations should be determined in a way that makes the organization different from its competitors. Strategy is the approaches determined by the top management level to make the organization successful (Griffin, 2000). Top management should develop strategies so that the information overload in the organization does not lead to organizational inefficiency. In the study, the participants were also asked for solution suggestions. These recommendations can be accepted as the recommendations of the research. Further studies in larger groups are needed on this subject.

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