VIRTUAL LEADERSHIP AT DISTANCE EDUCATION TEAMS

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ABSTRACT

Globalization being one of the most popular terms of recent years is considered as a factor changing the operation styles of the companies. Companies and universities opened up to the world with the globalization and as a result of it, they had the opportunity of being a world brand. Now, some companies have affiliated companies in almost every country. Well, if we think about time and place difference how do these companies lead the affiliated companies in various locations of the world? This question resulted in the new leadership approach, virtual leadership. The process of distance learning beginning with newspaper advertisement appears as virtual learning now. A number of companies and universities provide distance learning classes and in-service training in virtual platform via Internet. These trainings provided independently from time and space are conducted in a country and worldwide sometimes. If we consider individuals in different time and environments as virtual teams, dealing with these virtual teams is the duty of virtual leader. The purpose of this study is to examine virtual leadership perception of distance learning teams. Three trivets are in question for distance learning teams. The first one is the academicians lecturing the second one is the students and the third one is coordinator and technical support team. Perceptions of virtual leader of the said three groups were examined individually in this study. The major findings are about who the virtual leader is and what properties virtual leader should bear. The virtual leader is, anyone inside the team for academicians, manager for technical support team and teacher for students. The most important ability for virtual leader is communication skills. In this study, there are different perspectives about virtual leader and leadership at distance education teams.

Key Words: Distance Education, virtual teams, virtual leadership

INTRODUCTION

The virtual team concept is one which has entered our lives upon the development of technology and thereby the change in communications media. At present, people, whether employed by a company or not, may work and make a living by using information and communication technologies at home. And this shows us the power of information and communication technologies. Starting from the question "As a single person may achieve this from home, why cannot companies achieve it?", the virtual team concept has been put into the agenda of companies and educational institutions. When we look into the present state of affairs, we see that to be a world brand and a center of attraction for companies and educational institutions respectively has been associated with the importance placed on virtual teams in a directly proportional manner.

In the new economic environment where conditions of competition have changed, business concerns have tended to form new organizational designs which may respond to the requirements of the age. Business concerns employ brain workers in accordance with these

new designs. Increase in brain workers has paved the way for the adoption of such human resourcing applications as working at home, mobile working and tele-working which encourage flexibility and the flexible work arrangement (Naktiyok, 2006).

Virtual teams have attracted attention on themselves in the business world and academic circles thanks to its inherent potential competitive advantages on one hand while they have put into agenda several issues thanks to their structure and dynamics (Yesil, 2011). Importance of such issues as leadership, confidence, motivation, communication, culture, etc. in virtual teams must be emphasized (Kirel, 2007). Technology must not be an end but a means in education. Support must be taken from technology in order to achieve learning in an efficient manner (Sonmez & Gul, 2014).

The significance of this study is understanding of virtual leadership perspectives in distance education teams. Because it is a new leadership approach for people. The aim of this study is to raise awareness about who virtual leader is and what virtual leadership is in distance education teams. If awareness can be created in people's mind, more studies will be done in this regard, and virtual leadership perception will be become clearer.

VIRTUAL TEAMS

Virtual team is a group of people coming together to achieve goals in an electronic environment. Other names of virtual teams are cyberteams, dispersed teams, distributed teams and online teams at the literature (DuFrene & Lehman, 2012).

Virtual teams allow for people in different locations and at different time frames to be able to work in different locations and at different times without coming together in accordance with common purposes, using such communication media as e-mail, telephone, groupware and video conference (Akkirman, 2004). Virtual organizations have emerged once computer technology made communication covering distance, time and culture possible. Reply to the question "Why virtual team?" lies behind the technological developments, global competition and environmental factors. Conditions required for establishing a virtual team are to work with specialists, to take place in a fast-changing industry, to have a different company culture and to use advanced technology (Varol & Tarcan, 2000).

Leadership dilemma can live in a virtual team sense. Firstly, people random or casually join wide variety of social and organizational phenomena. Second, we should consider the difference between virtual new product development team and an engineering web-based learning network which are called virtual teams. In the first case, members share responsibility and develop interdependence with e-mails. In the second case, the organization creates the conditions for effectiveness. After the research about this dilemma, it is clear that, the web-based interest groups and other loosely formed collectives aren't virtual teams (Gibson & Cohen, 2003).

Teamwork is common work value for companies which using teams organized around successive task. And virtual team is the latest point about teamwork. Team members use technological information and communication devices like mobile devices, text messages, e-learning modules, cloud computing owing to network and wireless technologies for access. There are lots of definitions and names about virtual teams. But consensus idea is using information and communication technology for overcome distances. Only difference between traditional team and virtual team is simultaneously working together, while physically apart. The success factors of virtual teams are clarify team goals, roles, individual responsibilities and deadlines. There are three stages of virtual team development. These stages are setup, follow-through and refresh (Zofi, 2012).

There are characteristics distinguishing virtual teams from the other ones. In conventional teams, team members are face to face at the same location and carry out synchronous coordination face to face. But in a virtual team, members are at different locations and in contact via non-personal and asynchronous media. Team coordination is not much required

due to the organization system. Characteristics of virtual teams may be listed as being deployed, employee empowerment, mobility, interdependence, common purpose and confidence. Considering their advantages and disadvantages, travel expenses, saving of time, capability to access to abilities and skills without having to meet in person, giving personal freedom and accompanying efficiency may be listed among advantages. Reduction in the follow-up and control of operations, conflict, communication problem, lack of confidence and power complexity, and technological incompatibilities may be shown as disadvantages (Yesil, 2011).

It is important to create common purposes among the members and to have the members believe in such purposes in virtual teams. Vision, mission and goals are more important for virtual employees. These terms facilitate the integration of the employees with the organization and one another. Further, the terms vision, mission and goal serve as guides for the virtual employees to make decisions as well (Akkirman, 2004).

When one studies the definitions, it is observed that the virtual team and virtual organization concepts are used in the body of literature. The common feature emphasized in all of them is that companies and educational institutions should head for virtual media so that they may survive under global competition conditions. Teams consisting of individuals using different languages in different geographies bring about several advantages. As long as communication is established well, organization organized well and job descriptions identified well. Thanks to virtual teams serving in different continents, a company or educational institution may be open on 24h basis, thus responding to any requirements.

Virtual Teams and Leadership

It has been possible to supervise workers and tell them what to do and how throughout history. It is not, however, possible to supervise bran workers. Because they have more information in the job they perform than anyone else. Otherwise, they are then in a useless position in terms of achieving the intended purposes (Bozkurt, 1996; cited by Akkirman, 2004).

In their study, Polat and Arabaci (2014) have used the open leadership concept about the leadership performed in social network media and online education. Open leadership has been emphasized as that a manager should abandon his effort of control in order to be successful. They have stated that the open leadership concept may eliminate the risk of failure to consider social conditions in the process of making such decisions which may appear upon the establishment of social teams in educational organizations in particular. It is anticipated that open leaders will turn to leaders focusing on monitoring, sharing, commenting, producing, organizing and supervising.

Managers have recently encountered a mode of management to which they are not accustomed. They have had to face an environment where such concepts as controlling and supervising the employee on the job which they have always applied remain inadequate. This mode of management is virtual team management. Management of those teams working synchronously or asynchronously out of the office at home in a different province, a different country or even a different continent has made it necessary to attain different skills. And the virtual team leadership concept has thus emerged. Notwithstanding it being a company or an educational institution, they will need virtual team leaders who will manage their virtual teams well in order to be able to come to the forefront under global competition conditions and even remain standing in the future.

Features Distinguishing a Virtual Leader from other Leaders

As sub-units spread throughout the world in e-businesses, e-business leaders must communicate with a team located not in the same office or building but spreading over different geographies all over the world via electronic media. An e-leader must possess such skills, features and behaviors different from conventional leaders so that he may catch the hearts and brains of those who follow him (Naktiyok, 2006).

A virtual leader must possess the abilities of selecting and using the proper technology which may provide collaboration, confidence and effective communication on virtual media, creating an environment of confidence, managing cultural differences and coaching his employees (Kirel, 2007). A virtual leader must have knowledge about languages and cultures. He must be able to manage any barriers and conflicts between languages and cultures and overcome such problems (Pelayo, 2013).

According to the study performed by Naktiyok (2006), it has been revealed that such variables as persuasive skill, participatory decision-making, IT utilization, sense of humor, creativity, vision, clarity, reliability, motivation, global thinking, risk taking and inspiring have a determinative power in distinguishing the behaviors of an e-leader and a conventional leader.

Management views of virtual team leaders display some difference as compared to the features of conventional leadership. Table1 contains the skills which a virtual team leader must possess (Akkirman, 2004):

Table: 1
Competencies of a Virtual Team Leader

Areas of Ability	Skills
Performance management and coaching	• Ability to set performance goals and develop strategy, • Ability to set measures for team efficiency, • Ability to provide and receive informal and formal performance feedback, • Ability to develop strategies which may justly reward the team members.
Selection and use of proper technology	• Ability to make plans in consideration of the task and type of the team, experience of the team, abilities of the team members and complexity of the organization, • Ability to hold virtual business meetings and plan the agenda thereof
Intercultural management	• Ability to discuss cultural differences in a constructive way, • Ability to create a working environment by making use of not only reconciliation but also cultural differences, • Ability to make plans considering how such team activities as planning, communication, reviews and meetings shall interact with the cultures of the team members
Transition period for career development	• Ability to make a career planning together with the team members, • Ability to defend the team members before the top management so that team members may be assigned to new positions
Formation of confidence	• Ability to keep his commitments, • Ability to establish good relations with the team members in a short time.

Source: Duarte, D. & Snyder, N. T. (2006)

Conditions of Success and Importance of Communication in Virtual Leadership
A sound foundation must be laid in order to obtain the highest value and to achieve success from virtual teams. As long as three conditions of success are fulfilled, the team will keep surviving. Of these three conditions, the first is goal, the second clear definitions of leadership responsibilities and the third the formation of correct team culture (Harvard Business School, 2011).

Those elements considered to be the condition of success in virtual teams have been studied. It does not seem possible to bring virtual teams into being or reach their potentials

particularly without a careful organization, support and attention to processes. Elements standing out as the conditions of success of virtual teams are identified as team formation, adaptation, effective communication, interaction, continuity of the effect of confidence, an effective information management, learning, utilization and management of technology, management of cultural dynamics, a good coaching and leadership effect, an effective coordination system, control mechanism, performance management, employee empowerment and project management (Yesil, 2011).

Due to their dynamics, virtual teams must use faster, better and more creative lines of communications as compared to other teams (Yesil, 2011). Communication bears importance in virtual teams especially at the time of decision-making and planning (Varol & Tarcan, 2000). New form of communication allows individuals to share their knowledge and thoughts without meeting personally. E-mail is the means of communication which is most used in all distance education systems (Yalcin & Kose, 2009).

In virtual teams, communication varies to a great extent as compared to other teams. It is not possible to make use of body language, gestures and mimics while communicating in virtual teams. In this case, it is not possible to comprehend the problems or motivation level of an employee. It is therefore so important to create clear communication channels in order to enable the team member to send messages to one another easily and to have them remain at the common goal denomination. The first attempt to be made to have the employees meet at the common denominator is to have them reach an agreement on the process and outcomes. Other options are to document the expectations and provide all with information about the processes (Harvard Business School, 2011).

Problems Experienced in Virtual Teams

Resistance of managers to change is an important obstacle we encounter at the stage of forming a virtual team. Managers' concerns about command constitute an important problem in terms of the difficulty of following up virtual teams. That there is a possibility for employees to misuse the flexible working conditions is another obstacle before virtual teams. Employees' staying away from the social environment is deemed to be another problem (Akkirman, 2004).

Different cultures, distance, poor opportunity of face to face communication, building trust, properties for selecting members for virtual teams, measuring reward system and develop day by day. All of these issues are the most important detail need to be solved (Gibson & Cohen, 2003). If one wants a good management in virtual teams, there are three important elements which must not be overlooked (Akar, 2005; cited by Kirel, 2007). These are awareness, communication and motivation respectively. One of the problems of managers in virtual teams is the performance measuring system. Performance must be defined well, be facilitated and encouraged so that it may be measured (Kirel, 2007). Competition issue could be addressed in this section. There are 8 problems about challenge in virtual teams (https://www.wrike.com).

- ➤ *Poor communication:* 33% of respondents cite communication as their greatest challenge
- ➤ *Access to expertise:* 14% report a difficulty in accessing the knowledge they need to succeed.
- ➤ *Technical management:* 14% say technical management is their biggest hurdle.
- ➤ *Planning overhead:* 12% have a difficult time planning.
- ➤ *Lack of training:* 10% claim their team is not adequately trained.
- ➤ *Cultural differences:* 9% say overcoming cultural diversity is their team's biggest challenge.
- ➤ *Team morale:* 4% have trouble keeping their spirits high.
- ➤ *Lack of support:* 4% don't feel encouraged in their work.

Lipnack and Stamps (2000) touch upon virtual gap and virtual edge. Working across organizational boundaries introduces communications and motivational problem is a gap.

It is needed to compensate just to bring the team up to the level of performance of a collocated team for prevent the gap. The edge of the virtual teams are using collaborative technologies, designing flexible organizations, compensate for capabilities which is lost and establish the basis for extraordinary performance.

Research reveals the importance of a leader in virtual teams. Problems experienced in virtual teams are usually leader-oriented. When the leader lacks confidence, concern of control occurs. Concern of control occurring in the leader brings about the questioning of quality and costs. And consequently, it leads to the occurrence of such negative conditions as lack of confidence, reduction of motivation and attenuation of organizational loyalty in employees. Virtual team leaders must therefore know and manage their teams well. He must well know their cultural features, personal characteristics and the common language the employees use so that he may know them well. Moreover, he must be able to motivate the employees for common purposes and set up the organization well. A good virtual team leader must continuously keep his communication channels open and give confidence to his employees. Employees must not have any doubts about the justice of the leader. Virtual team leader must cause his employees to feel that they are kept under control but must not embarrass them.

Virtual Leadership in Educational Organizations

In line with the consolidation of the technological infrastructure, schools' capacities of using information technologies improve. It is observed that virtual team works develop as the use of internet gains wide currency at schools. School managers who have attended the OYGEP (Improvement of School Managers Project) have formed so strong a virtual team among themselves. School managers who lead these teams integrate the efforts of virtual team and try to cause minds meet by creating a virtual brain storm. Spheres of influence of school managers limited to the school may now reach farther beyond the school through their role as the virtual team leadership. Virtual leadership of school managers will be a leadership approach which comes to the forefront in the future school organizations. **(Celik, 2013, s.208-209)**

For Ibrahim's (2014) research findings, virtual leadership model can be applied successfully on the schools leadership field. He has done that article, because evaluate suitability of intra-team communication and job performance among school leaders in Malaysia. It shows that, that article similarly resulted as the pre researches as noted in that article, and that suggested virtual leadership can be practiced by leaders through communication technology, especially mobile technology. Jenkins (2015) asserts that elements in findings of his research should be the foundation for a statement of objectives within a request for proposal that a government entity might use in soliciting services for a virtual leadership development course.

Upon the entry of interactive boards and tablet PCs in educational environments, some differentiation has occurred in the lesson-teaching processes as well. At some schools, teachers give homework on virtual environment, using e-mail addresses. Considering universities, it is clear that those universities without distance education system do not have any chances in the competitive environment at all. Besides, it is observed that those universities opening certificate and diploma programs not only within the country but also at the international level are preferred more. At present, whether governmental or private, managers and teachers of educational institutions must have a character of being good virtual leaders. Virtual leadership perception must be settled well in order to prepare the educational environment, teach lessons and provide communication with students in a strong manner.

Virtual Leadership in Distance Education

Together with the momentum which occurred in the increase of information as a result of the developments in science and technology, keeping data up-to-date has become a necessity. This necessity has resulted in the proliferation of on-line media in the field of education as well. In cases where the population increase and traditional education fail to satisfy needs, especially in consideration of equality of opportunities, distance education practices and alternative education concept have come to the fore in higher education (Bilgic, Dogan & Seferoglu, 2011). Failure to perform the works at the necessary level due to limitations in traditional education and training has laid the way to the investigation into alternative methodologies. As a result of such works, distance education methodologies with various forms of application have been developed (Yalcin & Kose, 2009). Digital communication between the school organization and the school society, i.e., use of the interactive network by the school management, contributes to the quality of educational and training programs (Vazquez-Cano, 2014).

In distance education, a leader is defined as an entrepreneur who permits innovative changes, has creative ideas and follows clear routes in order to achieve certain goals. Mentorship and entrepreneurship are one of the conducts which distance education leaders must fulfil. Educational institutions must have a strong brand image in order to attract students to the new distance education institutions (Gunduz & Bozkus, 2013).

When the studies by Bilgic, Dogan and Seferoglu (2011) have been examined, it has been found out that the most frequently encountered problems in distance education are deficiencies of lecturers in distance education, their incompetencies in technology and shortage of time. That the academicians have to prepare distance education materials among their existing work load appears to be another issue in which they have been challenged. In the study, internet connection and infrastructural problems have also been emphasized. It is stated that instructors must be provided with both pedagogical and technological training in order to overcome such problems.

In a different research, three major problems have been identified in distance education. These are the quality of education, misuse of technology and effectiveness of costs. The leader must issue technology utilization guidelines. He must use current curriculums. They must work with instructors who may use technology. They must manage costs well (Gunduz & Bozkus, 2013).

Distance education is the environment in which virtual teams may be most clearly observed. A distance education center consists of academicians, technical staff members and students. Academicians create contents related to their own fields. Technical staff members are responsible for interface and infrastructure. Coordination and process are an operation implemented by the technical staff members. Technical staff members are also responsible for any problems which may transiently occur. It is the responsibility of the technical staff members to implement the courses in a good way, to communicate with students via e-mail and to send collective information. And students are obliged to follow the courses. Communication completely takes place on the virtual environment. E-mail is the means of communication which is used most.

METHODOLOGY

In this study, qualitative research method has been used as a research model. Interview is one of the most widespread data collection techniques in qualitative research. It is more effective in ensuring to make use of the experience and views of individuals. As the people who attend the interview put their views into words verbally, they have a chance to express themselves in a more comfortable manner (Yildirim & Simsek, 2011).

Interview is the technique of collecting data through verbal communication. Although an interview is usually carried out face to face, it may also take place via instant sound and video transmitters such as telephone or video talk. Further, motion communication carried out with the deaf-and-dumb is also included in the interview class (Karasar, 2012).

The reason why the qualitative research method is used in this study is to obtain in-depth information on the matter. Views of both academicians and technical staff members and students have been asked in order to study the virtual team in distance education concept

through their eyes. The most appropriate way to study the virtual leadership concept in distance education teams is to apply the interview technique. Therefore, the interview technique has been applied as a means of data collection which is one of the qualitative research methods in order to obtain qualified data through open ended questions. Ten questions have been asked in the interview. Participants have been assumed to have given earnest replies to the questions.

Field of study consists of three groups. The first group is the academicians, the second group the technical support team and the third group the distance education students. The academicians are from Canakkale Onsekiz Mart University and they are working in distance education unit at this university. The technical support group include Informatics Department Teachers at the same university. The students comprise especially state school managers and teachers. The other students comprise the other universities' instructors, students and military service members. First, each group has been evaluated within itself. And then the three groups in question have been compared and a common conclusion reached.

Collection of data: academicians and technical team have been interviewed face to face. Limitations of the study: virtual communication methods have been employed in order to reach the distance education students. Questions of the interview form have been communicated to the students via e-mail and SMS by using Google documents. Google documents and interview findings were investigated with content analysis method. Each answer was investigated and most often repeated phrases were noted. Frequency tables were created which are mostly repeated in the answers. Close answers were given together under the same title when the frequency tables were creating. Therefore, differences can be seen between the description contained below the tables and given numbers in the tables.

FINDINGS

Forty-four people consisting of 5 academicians and 11 technical support team members employed by and 28 distance education students attending Canakkale Onsekiz Mart University have participated in the interview about Virtual Leadership in Distance Education Teams. Ten questions have been asked in the interview form prepared to study the Virtual Leadership in Distance Education Teams concept. Questions have been prepared by the author of this article, after review the literature. Replies given have been evaluated within the scope of content analysis. Demographic characteristics of the participants and findings obtained for each question are as follows.

Table: 2
Participants Characteristics

By gender

Female	Male	Total
11	33	44

By age

20-25	26-30	31-35	36-40	41-45	46-50	Total
4	7	10	10	7	6	44

By priority

1-5	6-10	11-15	16-20	21-25	Total
9	5	15	9	6	44

Question 1: What is a virtual team in your opinion?

Table: 3
Description of virtual team

No	Participants Opinion	F
1	The organization located in the virtual world with internet and technology	23
2	Organizations have come together for specific purposes	20
3	Physically independent	18
4	Information exchange	10
5	Timeless	3

According to the replies given by the academicians, a virtual team is people who come together on a virtual environment in accordance with common purposes. The same question has been given a little more technology-oriented replies by the technical support team. It is defined as a team producing work and sharing work load on virtual environment by making use of information and communication technologies on the internet environment. Considering it from the standpoint of the distance education students, it has been described as people working synchronously in a virtual manner, who produce and share information and who need not know one another. Of the academicians, P2 has expressed his view on the matter as follows: "*It may be defined as a group working for certain purposes on virtual environment even if they are not physically present in the same location.*" View of P16 of the technical support team is: "*A group of people who share the work load by using technological structures for the same purpose.*" Of the distance education students, P20 has given the following reply: "*A virtual team: areas of ability of the virtual team leader must be planning and coordination, performance management and coaching, proper use of technology, development of the careers of the team members, establishment of confidence, development and adaptation of team processes.*" Of the participants, P28 has given the following reply to the same question: "*I can say that what I understand by a virtual team is a virtual organization coming together for a purpose, which does not exist in fact but makes its existence felt.*" As a conclusion, it is observed that the virtual team perception of the academicians, technical support team and distance education students is in accord.

Question 2: How do you define virtual leadership?

Table: 4
Defining virtual leader

No	Participants Opinion	F
1	Guiding the team	20
2	Affecting the goals	14
3	Providing coordination	9
4	Manages the team	8
5	Motivating	6

Academicians have defined the virtual leadership as influencing, guiding and motivating one's team in accordance with certain purposes. Technical support team has defined the

virtual leader as a person who tries to manage a team that never see one another on an information platform. A virtual leader has been defined as a person who has good command of technological structure, carries out task division, identifies roles and provides coordination. According to the views of the distance education students, the concept which is mentioned most is guiding. They have defined the virtual leader as the person who guides and motivates his team in accordance with certain purposes. According to the comment of the academician participant P5: "*He is the power to be able to effectively motivate the team members included in the virtual environment in accordance with common purposes.*" According to P9 of the technical support team: "*The person who manages the virtual team. He gathers the team around a common purpose. He determines the task division and the roles. He provides the coordination.*" View of the distance education student P28: "*The person who organizes the virtual organization through technology.*" P33, who is also a distance education student, defines the virtual leadership as follows: "*I think it is a new concept. He is the leader who guides the organization on virtual environment.*" It is observed that the technical support team especially focus on management and coordination while the academicians and distance education students usually emphasize the leader's ability to guide and motivate.

Question 3: Do you think distance education organizations are a virtual team each and why?

Table: 5
Connection between distance education and virtual team

No	Participants Opinion	F
1	Distance Education is a structure that will be an example to the virtual team	25
2	It consists of people who come together for a specific purpose	12
3	Uses Technology	11
4	There is a leader	6
5	It can't be said for all	6

Academicians consider the distance education organizations to be a virtual team each. They consider them as a virtual team consisting of instructors, students and executives, who are located in different environments and communicate for the same purpose on a virtual environment. Eight of 11 people comprising the technical support team have considered the distance education teams to be a virtual team while 3 have presented different views. The participants who have argued that each distance education organization is not a virtual team have stated that the individuals comprising the distance education organization are usually located in the same environment. When the matter has been considered in terms of the distance education students, 21 participants out of 28 have stated that they consider the distance education organizations to be a virtual team each. Four participants have presented different views and stated that distance education organizations are not virtual teams in their entirety. And 3 participants have replied that "*They have no idea.*" of the academicians, P1 has replied in the following way on the matter: "*Yes. Because individuals are not located in the same environment; they are physically separated from one another but all together in psychological way.*" According to the view of P11 of the technical support team: "*They are a virtual team. Because students and teachers are parties who respectively delivers and receives educational services on the internet without coming together in a physical way. One should also remember the other specialists who assist this team in technical support services. It is important for the efficient accomplishment of educational services that they set up and follow up this virtual environment and foresee any hitches which occur and take any measures therefor.*" P15, who have presented a different view, has clarified his view in the following way: "*They are not. Because distance education*

organizations are teams that make up and manage the educational environment and are usually located in the same environment. If there is any distance education organization, it is among the distance education students." **Of the distance education students, P21 has presented the following view: "***Certainly. To come together for education on a virtual environment will fit in the given definition."* **According to P26, who has presented a different view:**

> **"***Not exactly, because knowledge sharing should take place on a certain subject. Particularly, no different voices will be uttered by a team consisted of people who are located in the same environment. They should be such groups in which there are different social, economic and cultural views and in which members share their knowledge with one another. We observe that knowledge is usually shared unilaterally in distance education and, for this reason, they may not cover the virtual team concept in its entirety. What the team concept strikes a chord on me is that there should be a guide in the team and other members therein should shoulder the responsibilities to the same extent."*

While all of the academicians qualify the distance education organizations as virtual teams, the technical support team and distance education students advocate two different views. While a majority state that distance education organizations are virtual teams, 7 participants argue to the contrary. And they argue as a reason that the groups other than the students are not distance but located in the same environment. Moreover, the students who allege that communication is unilateral have stated that there should be mutual interaction in virtual teams and therefore distance education may not be a virtual team.

Question 4: Who are included in the distance education teams?

Table: 6
Distance education team members

No	Participants Opinion	F
1	Technical support team	25
2	Lecturer	24
3	Student	20
4	Leader	10
5	Management	10

Academicians have made a grouping under 5 headings. Student, teacher, moderator or director, technical staff members and auxiliary employees have been mentioned. Technical support team have given detailed replies. Eleven participants have stated the units in the technical support separately. The most mentioned groups are moderator, technician, subject matter expert, video recording team, system supervisor, graphics and animation supervisor, scriptwriter, designer, editor, content developer, software supervisors, director, teacher and student. Distance education students have dwelt upon 3 groups in general. They have grouped them as the lecturer who delivers lectures and who is a specialist in his own respective field, the team providing technical support and the student. Besides, some participants have also mentioned controlling body, coordinator, manager and guide groups. While two of the participants have replied "*I have no idea***", one participant has replied "***They are not teams***". In connection with the distance education teams, P3 of the academicians has replied: "***The distance education teams contain a learning individual, lecturer, technical staff members and auxiliary employees."*** P10 of the technical support team has replied: "***This team contains a manager, manager assistants and members dealing with the other affairs of the team. These people may be as follows:***

hardware and equipment supervisor, material supervisors, web-mobile support supervisors, live lecture supervisors, etc. Size of the head office affects the size of the team." The comment of P18 of the distance education students is as follows: "*The management maintaining the management, coordinator, lecturers giving lectures who are sometimes leaders and sometimes group members, we who are team members, the team leader will show up soon, the representative whom we have elected among ourselves.*" Of the participants, P30 has commented as follows: "*People who are specialized in their won respective fields, bodies controlling them and leader who carry out task division and job tracking.*" As it will be seen in the replies provided, the replies especially gather around an instructor who is specialized in his own field, technical support, student and management. Besides, it is observed that the members of the technical support team have entered into details and mention sub-groups within the support team.

Question 5: How do you define the virtual leadership concept in distance education and who is the leader of a distance education team?

Table: 7
Virtual leadership concept

No	Participants Opinion	F
1	Lecturer	15
2	Directing people to the organization	12
3	Manager	11
4	Visionary	4
5	Technical support team	3

According to the common opinion of the academicians, whoever performs the work of guiding and motivating in the team is the leader. Further, according to the opinion of three academicians, leadership behavior is expected of the instructor. The situation indicated in the second question appears before us in this question as well. Therefore, 7 people of the technical support team have associated management with leadership and have identified the leader of the team as the unit chiefs. The other four people of the technical support team have stated that anyone who is able to guide and influence the employees within the team may the leader. According to the distance education students, 8 participants have defined the leader as the academician who gives the lecture. Eight participants have replied that anyone who is able to motivate the individuals and who comprehends technology may be the leader. Out of 6 participants, one has stated that the leader is the moderator, another one has said that it is the president and the others have stated that the leader is the people who are responsible for administrative affairs. Three participants have defined the leader as the person who ensures the functionality. While 2 participants have replied "*I do not have any idea*", one participant has replied "*They are not teams*". In connection with the distance education leader, the opinion of P2 of the academicians is as follows: "*In distance education, the leader is the instructor, considering the lectures. He should guide the technical staff members, students and materials in accordance with the purposes of the lectures.*" According to P8 of the technical support team: "*It is the person who guides the people who will form the infrastructure and contents of the distance education, performs the job descriptions and task divisions, organizes the communication and follows up the processes.*" Of the distance education students, P18 has stated the following:

> "*It is the person who ensures the distance education to progress to the purpose, guides and motivates the team, finds solutions to various problems, anticipates and takes measures against any potential problems and meets students with education. I think the manager/president of the Distance Education Research and Application Centre is the team leader.*"

According to the participant P42: "*In the very beginning, the person who organizes the distance education is considered the leader. However, leaders in the given lectures are the teachers of such lectures.*" To gather the data under three headings, the view presented most has been revealed as that the leader may be any individual who is able to influence and guide. The second view has been stated as that the leader is the academicians who give the lecture. And the view finally stated is that the managerial or administrative unit dealing with the organization is the virtual leader.

Question 6: What is the duty of the virtual leader in distance education?

Table: 8
Duty of virtual leader

No	Participants Opinion	F
1	Providing coordination and guidance	17
2	Organize the team	11
3	To bring people together in team	8
4	Makes contact constantly	7
5	Constitutes and planning the learning environment	4

When one studies the replies given by the academicians, it is revealed that communication and motivation are those concepts which come to the fore. Importance of the communication with the technical team and the inclusion of the technical team into the lesson has been particularly emphasized. Besides, such duties as clarifying the mission, revealing the vision, making timetable, encouraging the students to participate, leading in decision-making, organizing the giving of lectures. According to the replies provided by the technical support team, guiding and management are in the forefront. Moreover, replies include making job description and task division, motivating the team, following up the administrative process, identifying the requirements, creating vision, establishing communication and selecting personnel. From the perspective of the distance education students, the job description of the virtual leader has proved to be scattered. Such job descriptions as guiding, combining the team, managing the team, ensuring the education to take place to the purpose, making task division, planning correctly, providing information, organizing and coordinating, making communication continuous have respectively appeared. Besides, replies further include such job descriptions as exercising authority, ensuring full participation of the group, using time correctly, creating vision, using ability of persuasion and making the team feel valuable.

One participant has replied "*They are not teams*". P5 has given the definition of the virtual leader in distance education in the following way: "*His most important duty is to motivate.*" In P7's opinion, a virtual leader's duty is "*to be able to establish the interdepartmental communication, to select the best people for the education to be given and make them a team.*" According to P29 of distance education students, a virtual leader's duty is "*to plan correctly in order to achieve the goals and to cooperate with the authorities in the formation of the best team specialized in its own respective field.*" Of the participants, P32 has stated the following about the duty of a virtual leader: "*To communicate with the group members continuously in order to solve their problems. To control his team by motivating them. He makes the team members feel that they are valuable.*" Job description of a virtual leader in distance education which is mentioned in all three groups appears to be

motivation and guiding. These characteristics are followed by creating programs, ensuring participation, creating vision and communicating. Considering in terms of distance education students, it is observed that virtual leadership qualification is attributed to managers.

Question 7: What are the characteristics distinguishing a virtual leader from other leaders?

Table: 9
Differences between virtual leader and others

No	Participants Opinion	F
1	Leading virtual teams	9
2	The physical properties may not use	8
3	Using technology	8
4	More effective, efficient, and be persuasive	7
5	Provides fast communication and using effective communication tools	6

The common characteristic represented from the academicians' perspective is that virtual communication and interaction are more limited and more difficult as compared to face-to-face communication. However, its further characteristic has been given as the possibility to access to more people. The technical support team has approached the virtual leader completely from a technological standpoint and stated him as a person who must have competence on information technology. It has been stated that job descriptions must be much more clearly identified by the virtual leader as there is no face-to-face communication. Further, a participant has emphasized that the virtual leader must work in a result-oriented way but not in a process-oriented way due to spatial distance. It has been stated that he must be of such competence which may respond to the needs and requirements of the team despite of the difference in time and space. According to the distance education students, the most distinct characteristic which distinguishes a virtual leader from other leaders is that he has very little change to use his physical features. It has been stated that his ability to persuade and influence must therefore have been developed. As an affirmative characteristic, it has been stated that time may be saved although communication is difficult. It has also been emphasized that he should understand the information and communication technologies well and that he should use the means of communication much more efficiently. Moreover, it has been stated that a virtual leader must be reliable, provide motivation and guiding. One participant has emphasized that a leader may not go beyond being a manager in a virtual environment. Another participant has stated in a humoristic approach that a virtual leader might not have any ambition for position. Two participants have replied "*I do not have any slightest idea*". Reply of P1 who has stated his views on the matter is as follows: "*While other leaders have a chance to be face to face with the audience, the virtual leader does not have this chance. Besides, the virtual leader is able to access to a great number of audience. And this increases his power.*" Reply of P9 of the technical support team has been as follows: "*As the virtual leader may not physically come together with the team members frequently, he should very clearly identify the purpose, roles and duties.*" And according to P13: "*Characteristics distinguishing the virtual leader from the other leaders are that he is unable to communicate face to face with his team at all times and should work on result-oriented basis but on process-oriented one because he may not be included in the working processes.*" Reply of P21 of the distance education students has been as follows: "*It may not always be easy for the virtual leader to access to the team or the team to the leader; sincerity may be felt more as compared to the virtual environment, but the virtual environment may provide more saving especially in terms of time as compared to the other leaders.*" P28 has told the following on the matter: "*Leadership whose existence is*

perceived, with which faster communication may be established and in which one may act more easily in whether or not directives should be performed." The common characteristic of the virtual leadership which is mentioned by all three groups is that communication should be stronger. Views of those participants who consider the teacher to be a leader and provide replies considering their live broadcast training display some more differences. These participants have stated that tone of voice, gestures and mimics are important for leadership skills in giving lectures.

Question 8: What are your views about how the virtual leadership in the present situation and how it should in fact be?

Table: 10
Virtual leadership properties

No	Participants Opinion	F
1	Communication must be good and sharing should be able to do	8
2	The leader must be open to technology and innovation	7
3	Guidance, planning and follow-up work should be done well	4
4	Must be democratic and transparent	4
5	Decisions participation must be ensured	3

When one studies the views of the academicians on how the virtual leadership is, they have stated that it appears to be the state of the conventional leadership concept in the virtual environment. Further, the participant who qualifies the virtual leader as the instructor has said that the instructor must have more initiative. Views concerning how a virtual leader should be have been represented as being visionary, having more different leadership skills, being a little more independent of the technical staff members, having higher verbal and written communicative competence and having good command of technology. In connection with the existing virtual leadership, the technical support team have stated that management qualifications are required rather than leadership. It has been emphasized that there are problems in achieving coordination and that transparency is not at the sufficient level. It has been further stated that a conflict of power and position may be experienced. Characteristics required to be possessed by a virtual leader have been listed as follows: following up technology, being open to developments and able to change in accordance with such developments, sparing a substantial part of his time to this work and implementing the works and transactions in a well-planned way and being strong in human relations. Three participants have not replied this question. While the distance education students have not provided much information on the existing situation, they have dwelled more upon how it should be. They have listed the characteristics which a virtual leader should possess as having strong communication, being able to influence the team, being open to technological innovations, being transparent and democratic, possessing foresight and being able to retain and guide the participants. Six participants have not represented their views. Of the academicians, P2 has made the following statement concerning the matter:

> *"Instructors should be able to take more initiative as virtual leaders. Technical staff members should be invisible in the class environment. Instructors should be able to implement their own classes from the beginning to the end and should make use of the technical staff only at the stage of preparing the materials. In the present situation, they should be able to open and inspect the classrooms without the technical staff."*

P10 of the technical support team has replied "*There is no basis or study concerning the existing situation of the virtual leadership. However, I am of opinion that it will be proper*

to provide information on the system and the leadership characteristics so that it may set an example for those people who will act as managers in the matter. Each of these subjects is of a separate lesson nature and is very detailed." **And P12 has replied:**

> *"I do not in fact have much information on the matter. However, I can comment on the matter as follows. I think that virtual leadership is not so widespread at present. But I think that advantages of virtual leadership must be benefited through the developing technology. I am of opinion that virtual leadership will be widespread when cloud technology (Google Drive) will be available for file sharing in the virtual environment, social networks (Facebook, Twitter), blogs (Blogger), wikis (Wikispaces) will be used in such events as file exchange and discussion and when free web conferences/meetings (Google Hangout) will be held in virtual environment."*

Of the distance education students, P3's comment on the matter is as follows: "*A virtual leader should not lay low but he is laying low now.*" P42 has replied on the matter in the following way: "*A virtual leader must ensure optimum participation of the people in the team and give importance to the opinion of the people before him and organize the works to be performed jointly.*" Some negative aspects in the present situation have been mentioned by the academicians and technical support team, but no comment has been made on the matter by the students. Common characteristics which all three groups have required in a virtual leader appear to be power of communication, influencing and guiding power and technological competence.

Question 9: How is a virtual leader expected to motivate the team members? Please explain.

Table: 11
Motivating team members

No	Participants Opinion	F
1	Participate in the process	11
2	Communication must be fast and well	10
3	Finding common interests	9
4	Valuing	9
5	Generating ideas for supporting the group's development	4

Replies from the academicians display diversity. This difference is also related to who is considered to be a virtual leader. The participant who considers the instructor to be the leader has stated that one must emphasize the importance of the lecture, appreciate and be good-humored and that the team may thus be motivated. In another reply, acknowledging that the community consists of groups and cliques, it has been emphasized that it should be motivated in accordance with the goals. The common view of the other 3 participants has been that the team may be motivated by taking expectations into consideration and making use of the power of communication. According to the technical support team, replies have been given by attributing the leadership qualification to the manager. The most repetitive reply appears to be effective communication and motivation. Other replies given include equitable task division and organization of joint events. It has been stated that the leader's making him felt to take place in the team and showing that he is part of the team will be a factor which will motivate the team. It has been stated that the leader should be realistic and evaluate any deficiencies and successes before all the members of the team. It has been emphasized that praise is a significant activating and motivating factor. The most frequently repeated concepts in the replies given by the distance education students are communication, motivation and participation in decisions.

Besides, guiding, good recognition of the team and creation of confidence therein have been stated to be motivating factors. Three participants have stated that they have no idea. Of the academicians, P3's views on the matter are as follows: "*A virtual leader addresses the team members in various social networking environments and motivates them within the framework of a common purpose. In this context, the virtual leader should continuously follow the team members and take their expectations into consideration.*" Of the technical support team, P13 has spoken on the matter as follows: "*One must not only consider the material aspect but it is also important to recompense the works performed in a spiritual way. For instance, mentioning the works performed with praises may motivate the team members to take action.*" Of the distance education students, P26 has spoken as follows: "*First, he should have been popular or his leadership recognized and if these occur he may motivate them as he pleases.*" And according to the views of P35: "*A virtual leader must be one step ahead of the team at all times, be active and well know the characteristics and requirements and expectations of the team.*" The resulting common replies appear to be good recognition of the team, good and instant provision of communication, motivating and guiding the team towards common purposes. It is understood from the replies given that praise and appreciation, consideration of the leader as part of the team are also important for the team members.

Question 10: Would you please share what you want to add concerning virtual leadership in distance education teams?

Table: 12
Last adding opinions

No	Participants Opinion	F
1	The process must be managed	4
2	Formal education, should be supported with distance education	2
3	It should be open to new ideas and practices	2
4	There should be non-teaching activities	2
5	Task-sharing should be equal	2

This last question has been replied by 2 of the 5 academicians. Both academicians have stated that supporting the formal education with distance education will lead to affirmative results in the preparation of organizations for the future. Seven of the 11 participants in the technical support team have represented their views. Comments have been usually made on the characteristics which a virtual leader should bear. Alternatively, it has been stated that it will take some time to accept it as it is a new form of leadership. The technical support team have considered the leader to be a manager as in the other questions and stated that a virtual leader must have his origins in informatics and be experienced in team work. As for the distance education students, 8 of the 28 participants have represented their views. Replies given also contain different views besides the works and transactions which must be performed by a virtual leader. For instance, a participant who considers the instructor to be the virtual leader has stated that it may be positive in terms of motivation that the first lecture will be a video lecture as it is of introductory nature. It is included in the comments that distance education studies are to be increased and that the leader may strengthen the communication through non-educational activities. P1's view on the matter is as follows: "*This epoch is increasingly including virtual applications into the organizational structure. While organizations possess a formal structure, they may put virtual applications into service as well. Thus, they will have prepared the organizations for the future.*" Of the technical support team, P9 has commented as follows: "*Unlike what is supposed, work load may be more in distance education than in conventional education.*" Of the distance education students, P35 has dwelled upon a different point with his

following comment: "*The virtual leader should both enhance intra-group communication and influence the group in distance education teams by achieving activities other than education.*" And P44 has commented as follows: "*Works related to distance education may be further increased.*" While the academicians and some of the distance education students have made comments of suggestive nature, it is observed that the technical support team usually comment on the characteristics which a virtual leader must bear.

Virtual leadership perceptions of the academicians, technical support team and distance education students have been individually studied. In general terms, it has been revealed that the academicians consider the virtual leader to be any one who is influential in the team, that the technical support team consider the manager to be the virtual leader and that the distance education students consider the instructor to be the virtual leader. In this way, influence of the position in the team on the virtual leader perception has been revealed as well. It has been observed that there are participants who do not consider the distance education organizations to be a team among the distance education students. In the light of the incoming comments, it is observed that the distance education applications are taken to an indispensable position in education with every passing day. It is anticipated that distance education and thereby virtual leadership will bear a greater importance and more studies will be carried out thereon in the future.

CONCLUSION AND SUGGESTIONS

Virtual teams are increasingly becoming indispensable in the business and educational life. To be able motivate people living in different social cultures in different continents at different time zones is a necessity for good functioning of virtual teams. And virtual leaders are those who will achieve this. As societies have not yet shaken off the conventional education concept, it should not be surprising that they consider the virtual leadership to be just a simple management concept. Virtual leadership is just a new concept which is included in the literature.

It is necessary to consider a virtual leader to be a little different from the other ones. Because virtual environments are freer, harder-to-follow environments where organizational loyalty level is more variable. It is the most important duty of a virtual leader to motivate the team members in accordance with the purposes of the organization. It is the responsibility of the virtual leader to establish an environment basing on confidence, first and then to clearly identify the job descriptions and know his team well and identify their needs. Even if the job of a virtual leader seems to be more difficult than the other leaders, it has advantages as well. It has such advantages as being able to access to more people at a time and to offer a comfortable working environment.

When one considers the distance education organizations to be virtual teams each, the question of who the virtual leader is emerges. This study has shown that who the virtual leader is or should be varies by the position. Academicians, coordination and technical support team and distance education students have approached the virtual leadership concept from different perspectives. It has not dropped off the map that the technical support team particularly considers the matter from too technical a perspective. While the academicians have usually defined the virtual leader as anyone who may influence the members in the team, the technical support team has defined the manager as the leader. And the distance education students have usually defined the instructor as the leader. The virtual leadership characteristics which all three groups have mentioned in common are communication skills, motivation creating ability and technological competence level. Another common leadership skill is creating confidence on and guiding the team. The common denominator of the virtual leadership concept of these three groups comprising the distance education team is that it requires different skills as compared to the other leadership approaches.

This study shows that results may vary as the virtual leadership concept is just a new concept. Therefore, studies may be carried out on the virtual leadership concept in different

institutions. While distance education organizations of different institutions may be worked with, the virtual leadership concept appears to be a subject on which studies may be carried out in fields other than distance education. More studies should be done on the subject of virtual leadership. Thus the difference between virtual leadership with the former leadership approach will be more clear. The studies about virtual leadership should be increased because of to determine the limitations about this issue. Because virtual leadership is the new leadership approach of the new business and new educational world and the leadership concept of the future.

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