### THE E-MAIL USE IN OPEN COMMUNICATION CLIMATES:

## A PATH-ANALYSIS MODEL

#### A. Gönül DEMİREL

Yeditepe University, Faculty of Economics and Administrative Sciences,

Department of Business Administration

Istanbul

#### Lebriz TOSUNER-FIKES

Yeniyüzyıl University Istanbul

#### **ABSTRACT**

Free flow of information is a reflection of open communication climate in organizations. In this study we tested to see whether or not there is a relationship between e-mail use, free flow of information in an organization, and if this relationship impacts job satisfaction. Thus, by using path analysis, we empirically tested e-mail use in an organizational setting. Results proved that, e-mail use makes a positive contribution to and has a positive influence on information flow; and, "freely flowing" information has a direct effect on job satisfaction.

**Keywords**: Open communication climate, information flow, e-mail use, job satisfaction

Açık İletişim Kültürlerinde E-Posta Kullanımı: Bir Yol Analiz Modeli

### ÖZET

İşletme örgütlerinde bilginin serbestçe akışı açık iletişim kültürünün yansımalarıdır. Bu çalışmada işletmelerde e-posta kullanımı ile şirket içi bilginin serbestçe dolaşımı arasındaki ilişkilere bakıldı ve bu ilişkinin iş memnuniyeti üzerindeki etkisi ölçüldü. Yol analizi metodu kullanılarak şirketlerde e-posta kullanımı ampirik olarak test edildi. Sonuçlar e-posta kullanımının bilginin etkin dağılımı üzerinde pozitif etkileri olduğunu ve "serbestçe dolaşan" şirket içi bilgilendirmenin iş memnuniyeti üzerinde doğrudan etkili olduğu hipotezini doğruladı.

Anahtar Kelimeler: açık iletişim kültürü, şirket içi bilginin serbestçe dolaşımı, e-posta kullanımı, iş memnuniyeti

#### Introduction

Our Previous publication showed that (Fikes and Demirel, 2010) the role of communication is a key factor in creating positive organizational behavior. Here our focus is on producing empirical data results which prove the significance of "information flow" as a main variable in defining *open communication climate* in organizations. In the process of doing field research, while evaluating data results, we were able to come up with a new model that shows the link between information processes and job satisfaction.

Because organizations have their cultures, because culture is shared and passed on by means of communication, because the relationships of organizational members and the relationships of what members' tasks are within the operations of the organization are relayed by communication, Organizations exists with communication. The simplest way to define communication is as follows: *it is the exchange of information between at least two individuals*. Communication transmits ideas, facts, thoughts, feelings and values. When communication is successful, it becomes a way in which, at least two people share "meaning" about how they feel and what they know. When the same meaning is not shared by those involved in the communication process, misunderstanding occurs.

Without communication, coworkers cannot know what they are doing, supervisors cannot give instructions, and management cannot control inputs and outputs. Cooperation and coordination networks would break down. The threads which maintain networks are based on shared information by people. The emergence and continuation of human networks are linked through communication (Bucholz, 1993) . Additionally, in organizations, communication in the form of "information flow" enables members to share and pass on organizational culture (Fikes and Demirel, 2010). We further argue that, in regards to solving the dilemma of organizational efficiency and effectiveness, we can see the obvious in-put "information flow" has in bringing these two organizational goals closer. Communication can help managers be efficient by enabling them to fulfill their managerial function: planning, organizing, leading, and controlling. Concurrently, communication can create effectiveness by creating opportunities for workers and all members to share their tasks, accomplishments, insecurities, concerns, feelings and opinions (Pincus, 1986). In effective communication environments, better performance and more job satisfaction is observed. In these environments workers understand what they are supposed to do, so they end up doing their jobs better. They are much more engaging in their work; this involvement gives them a greater sense of job satisfaction. In these environments it has been recorded that more voluntarism takes place (Pincus, 1986; Livarcin and Tosuner-Fikes, 2009). Therefore, open communication is generally better than resticted communication (Case, 1998). Workers and managers alike depend upon timely, accurate, and useful information in order to make sound decisions. Information is powerful, proper "information flow" is important. Without proper information, poor and inappropriate decisions could be made which could affect behavior and activities (Newstrom and Davis, 2002). In all respects, it is to the benefit of organizations to put into effect good and open communication climates.

Organizations are made up of social arrangements. Organizational units are shaped and held together by means of communication. In this system, information is passed on through both formal and informal communication channels. In this context, some consider information to be a commodity. A commodity is a product that is produced with the goal of exchange of money. Therefore, information in organizations has monetary worth. Information in organizations is crucial to developing successful projects, selling products (good and/or a service), or marketing them. In order for organizations to maximize the utilization of their information networks, an orderly flow of information needs to occur so that there are no disruptions to organizational operations and activities. Members of organizations need to know when project deadlines are due, what the needs of their clients are, when and where meetings are to take place, and the like. During these activities, peripheral speech acts occur creating motivation and bonding among organizational members; for example, complimenting a co-worker for a job well done, or what a positive attitude a colleague might have, or even how good a person looks and exudes energy. This type of communication is meaningful to the recipient, and it enhances work relationships and improves morale as well as productivity. This is the type of behavior found in open communication climates (Goldhaber, 1990; Redding, 1973).

In organizations, when there are barriers to the orderly flow of information and activities, certain individuals and groups are shut out from receiving the information necessary to maintain open communication climates. In these circumstances, communication mishaps develop. Where there are impediments to "information flow" and exchange, closed communication climates arise. Unlike open communication climates, workers in closed communication climates generally feel unhappy. These organizations tend to lose business, have damaged reputations, and damaged goodwill. The contrast between open and closed communication systems can be summed up best as Buchholz (1993) puts it: "Communication climate can be defined as the internal environment of information exchange among people

through an organization's formal and informal networks. Communication climate is open when information flows freely; closed when information is blocked"(p.1).

In organizations where we encounter open communication, information passes in all directions without distortion. Information flows upward, downward and horizontally without a glitch. In these environments, employees can express their opinions, voice complaints, make suggestions, talk among themselves about policy decisions, as well as other aspects of the business. W. Buchholz (Buchholz, 1993) in his article Open Communication Climate argues that three characteristics needs to exist in order to enable open communication to occur: 1.supportiveness, 2.participation and 3.trust. Other scholars of open communication systems confirm Buchholz' claim .Supportive environments mainly define the relationship between employees and their superiors. In these environments, employees can share information with their superiors without hesitation. There is a belief among employees that when information is shared with their superiors, they will not penalize the information giver. The nature of the information, that is, whether or not it is good or bad, favorable or unfavorable to the organization is not the key issue. The key issue is that employees can share with their superiors any relevant information that has to do with the organization's function and purpose. When superiors receive this type of information, it is expected that they will focus on the content; not on threatening the employee for bringing information to the attention of management. In order for employees to feel confident to take action, they must work in an organization where there is no doubt of managerial support (Fikes and Demirel, 2010.).

Participatory environments refer to the feelings employees have about their roles and contributions to the organization. If, when an employee reveals information, his/her effort is welcomed, then the employee feels that he/she is important to the organization. When employees are made to feel worthy of their efforts and concern, they are more ready to feel a sense of ownership, a sense of loyalty and a sense of identity with the organization. However, if management truly values the suggestions of employees, they must put talk into action. In other words, it is not enough just to listen to employees, when possible, it is important to implement what has been suggested to improve organizational operations. These could be, for example, within the organization (structural), or outside of it (marketing). Working as collaboratively as possible is encouraged (Fikes and Demirel, 2010).

In order for communication climates to remain open, information given throughout the organization must be true, and the source from where it comes reliable. If the integrity of the communication channels has been compromised, people will dismiss information given to them as bogus. Credibility in the process of information flow is key to establishing trust.

Employees have to believe the information given to them. The role of trust is the most significant aspect of open communication (Fikes and Demirel, 2010).

A recent study done by Kitapci, Cakar and Sezen (2005) on Turkish workers, 133 middle managers in 35 firms, concluded that there is a direct relationship between worker job involvement and the relationship with superiors. Here, the relationship between individuals and their superiors are studied for the perspective of TRUST. Their study shows that

"...employees' trust in supervisors help us understand variation in employee identification with the organization...trust is in authorities and identification are negatively and significantly related to employees' intent to quit" (Kitapci, Cakar, Sezen, 2005) (p.38). Their study also implies the following, "...employees, who work in organizations characterized with high trust in supervisory, feel more identified with their organization and less willing to leave the organization." (p.39). Recent research done by Ceri-Booms (2009) on Turkish organizations looking at the Leader Member Exchange Model (LMX) confirms the conclusions Kitapci et.al. (2005) reached.

Relatedness is another concept which should be considered within the framework of open communication culture in the Turkish organizations. As expressed by Erder (1985):

Even though cultural changes do effect family structure and relationships, the interdependence and interrelatedness of these relationships do not diminished nor are they abolished. For this reason, staying connected is central in maintaining family relations and friendships. This aspect of Turkey's collectivistic cultural traits can only continue to exist, given the contemporary communication vehicles at hand, by means of tele-communication. This is precisely why the role of e-mail is a cohesive force in keeping relatedness alive.(p.42)

In addition to serving Turkish culture in maintaining relatedness, we also propose that e-mail use supplies a fast and efficient medium for access to this very important *resource* in contemporary organizations. This new and heavily used channel contributes to the free distribution of information, and accordingly to open communication climate.

The importance of communication is emphasized (Weick,1979) as a vehicle which enables organizations and their members to achieve goals. Each department needs to use information from other departments, but they also need to provide information to these same departments in order to accomplish the tasks necessary to meet the organization's goal. This illustrates the extent to which departments in an organization may depend on one another to reduce their ambiguity. An ongoing cycle of communicating feedback takes place in which there is a mutual give-and-take of information. (West and Turner, 2004).

We elaborate on Weick's point about ambiguity by adding this: where there is ambiguity, there is usually an opportunity for conflict to occur (Tosuner-Fikes, Demirel, 2010.) Conflict work situations cause a sense of dissettling among organizational members. It is best to avoid ambiguity so that information flows accurately and equally to all compenents of the organization. We believe that, this can only improve job satisfaction.

Up to this point we have presented a summary of what we believe to be a positive relationship between successful organizational operations and proper information flow. From here on end, we will be presenting original research on organizational climate, based on creating a model precisely fort he purpose of this article.

As discussed above, a major part of open communication climate depends upon the "free flow" of information. Free flow of information is a major characteristics of open communication cultures (Bucholz, 2000; Fikes and Demirel, 2010) which result in more satisfied employees.

In this research e-mail use as an antecedent of free flow of information is empirically tested via path analysis and is related to job satisfaction. We predicted that, e-mail use makes a positive contribution to and has a positive influence on information flow, and "freely flowing" information has a direct effect on job satisfaction.

#### Method

# **Study Setting**

Preliminary interviews were done with the human resources directors or supervisors in conveniently chosen 18 large scale companies in the exploratory phase of the research (see section 3 for results). 2 open ended questions were asked. Questionnaires were then prepared and distributed to 300 expected respondents in the same companies. 270 returned their questionnaires, there with 220 valid surveys. The data was gathered in approximately 3 months.

# The questionnaire survey

The structured questionnaire surveys was back and forward translated by two different bilingual researchers following Brislin (1976)'s guidelines. Back and forward translated questionnaire was reviewed by experts and no changes or adaptations were recommended. The part of the questionnaire testing e-mail use is totally developed by the researchers of this study. The preliminary interviews guided us at this phase.

The following constructs: Involvement, Morale and Information Flow, were measured by Glaser, Zamanou and Hacker (1987) in their Organizational Culture Survey. These are represented as different parts of the total of 36 questions that constituted 6 constructs of the total questionnaire. In this study, Involvement, Morale, and Information Flow sections are adapted and included in the questionnaire. For the purposes of the research model of this specific study, Information Flow, consisting of 4 questions are used. A 5 point likert scale is used in the original format, but in this study A 6 point scale is preferred, ranging from "I strongly disagree" to "I strongly agree". Likert scales generally tend to underestimate the extreme positions (Allbaum, 1997; as cited in Lee and Choi, 2003). Respondents are reluctant to express an extreme position even if they have it. They tend to please the interviewer, appear helpful, or respond in what they percieve to be a socially acceptable answer. Resorting to a scale without a midpoint seems to help mollify this social desirability bias without changing the direction of the opinion (Garland 1991; as cited in Lee and Choi, 2003). The sixpoint scale avoids a midpoint, which prevents respondents from using a neutral default. The totality of the e-mail use questionnaire is developed by the researchers. In the section of the data analysis results will be given in detail.

The Overall Job Satisfaction scale (Camman, Fichman, Jenkins and Klesh 1983) is adapted to measure the concept of job satisfaction in the study. Satisfaction with the information provided is taken from the Organizational Communication Development Audit Questionnaire (Wii,1975). Demographic variables are also included and measured in the study.

### **Data Analysis**

Data analysis was carried out by using the statistical program package SPSS and AMOS 17. Exploratory factor analysis was performed on all of the 17 e-mail use items. First run of the PCA necesitated item six to be left out and rerun the PCA. Second Principle component analysis concluded three factors representing the dimensions of e-mail use. Each indicator loaded significantly to its hypothesized subconstruct. Factor labelling was done to these three dimensions. F1(Items14,16,17;e-mail use frequency), F2 (Items 7,8,11,12,13,15; freedom of information sharing), F3 (Items 1,2,3,4,5,9,10; extend of information quality).

Reliabilities as alpha measures were found to be F1: Alpha= 0,9097, F2: Alpha= 0,8477, F3: Alpha=0,7425.

To evaluate convergent validity, confirmatory factor analysis was used on AMOS 17.

In the first run the model did not fit the data. RMSEA=0,140 (expected almost 0), CFI= 0,810(expected equal to above 0,95), CMIN/DF=5,85(expected less than 5).In order to improve the model, based on modification indices and estimates results covariance arrows were added between the items and their error terms. Each time the model was tested till it was found to be fit with the data. The important thing here was to fulfill the requirements of the theory.

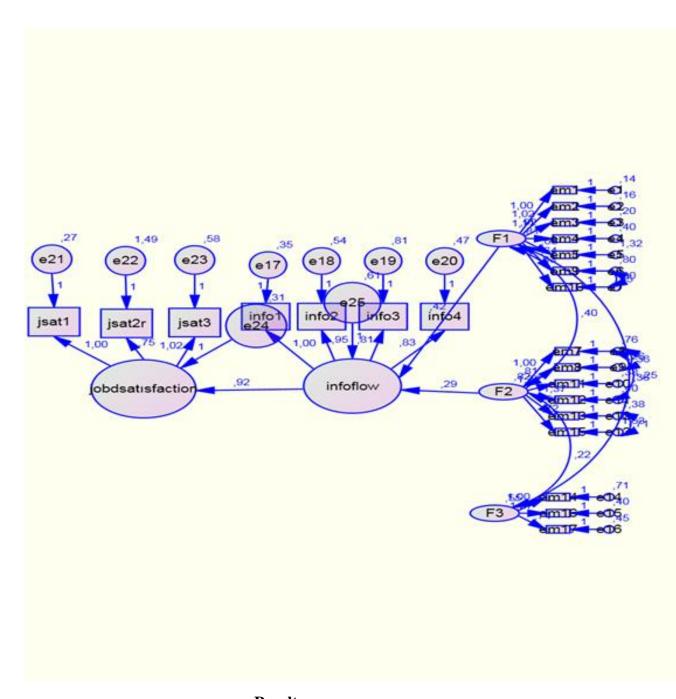
None of the items were excluded because beta values showed significance under modification indices estimates. The model was improved by adding covariances between items of the factors and their error terms (CMIN/DF=2,95).

Job satisfaction construct with three items showed sufficient reliability with alpha=0,7873. Confirmatory factor analysis result gave a good model fit with GFI:1,000, RMR=0,000. Under estimates all beta coefficients were significant with p=0,000.

The info flow construct with four items showed sufficient reliability with alpha= 0,8485.Confirmatory factor analysis result gave a good model fit with GFI= 0,995, RMSEA=0,031. Ki test is insignificant with p=0,3000 and Cmin/df= 1,204 which means an acceptable fit with the data. Under estimates in all of the items beta coefficients were significant therefore none of the items were ommitted.Path analysis was run for the final model. Modified structural model is presented below in Fig. 1.

Estimates showed that direct path coefficient in the first model from F3(extend of information quality) to infoflow was insignificant with p= 0,448 so was ommitted from the first model. All other direct path coefficients were significant. Then looking at the modification indices covariances are added and also some covariances which are insignificant are deleted from the model. Final model results showed that the model has an acceptable fit with Cmin/df= 2,253(less than 3) and RMSEA= 0,075 (0,06-0.08 acceptable). Direct path from F1(e-mail use frequency) to info flow was significant (p=0.000)with beta regression weight=0,424. Direct path from F2(freedom of information sharing) to info flow was significant with beta regression weight=0,294 and the direct path from info flow to job satisfaction was significant with beta regression weight=0,923. The direct path from F1(e-mail use frequency) to job satisfaction beta coefficient was found to be insignificant with p=0,619 and this influence is constrained to 0, or in other words the arrow is erased in the final model. The direct path from F3(extend of information quality) to job stisfaction beta coefficient was also insignificant with p=0,521 and was erased from the modified model. (see Fig.1)

Figure 1: Final modified path analysis model



# Results

# **The Preliminary Interview**

17 out of 18 participants all agreed that they have open communication climate in their organizations. All participants agreed that use of e-mail as an information distribution tool in their organizations contribute to overall effective use of info flow in the organization. All agreed that e-mail use contributes to open communication climate. One participant only

identified open communication climate in their organization as the present "open door policy". Other results of the interview were:

Face to face and e- mailing are the two major channels of information distribution in organizations studied. E-mailing is even prior to face to face communication because face to face meetings are also informed beforehand by e-mail. E-mailing is thus a major communication channel within the organization for information distribution. One participant stated that e-mail is a fast and cheap way for communication and information distribution, therefore it is preferred over other available channels. All participants stated that e-mails are like written contracts, active use is important for the organization. 5 of the participants stated that if relevant data is distributed correctly e-mailing is a major tool. However, sometimes unnecessary mailing is a sort of disadvantage. 8 out of 18 companies have intranet system ("I have and idea" corner). Each employee through this system facility can share their opinions and ideas with others ,therefore when used effectively e-mailing provides an efficient feedback system.

# The profile of the respondents

Descriptive analyses done on the demopgraphic variables of the questionnaire survey showed that the number of female respondents are 111 (52.1%), and male respondents are 102 (47.9%). %68.5 is between the ages 20-30. The second age group is between 30-40 (30%). University graduates are 8.0%, masters degree (31%), doctoral degree 0.9% (2 people).

### **Results of the Path Analysis Model**

Path Analysis is a statistical technic which is quite related to multiple regression analysis. In structural equation modelling (SEM) the aim of the path analysis is to test the SEM model with the latent variables (Kelloway, 1998). Path analysis is used to test the causal relationship between two or more variables and to compare the direct and non direct relationships. Although Path analysis is quite similar to multiple regression, it has some advantages over multiple regression. In SEM variables can be identified as dependent or independent at the same time. Path analysis shows similarity with causal analysis but is not used for exploring causality but instead is used to test and confirm the theoretical causality that is put forward. (Scumacker and Lomax, 2004). Path analysis allows the researchers to put all the regression equalities into analysis at the same time. Besides confirmatory, analysis models (where each latent variable is represented by measurement models) give more reliable results by allowing for inclusion of the error terms (Byrne, 2010).

# Obtained results from the path analysis

H1: E-mail use has a positive influence on information flow (substantiated).

H2: Information flow has a positive influence on job satisfaction. (substantiated).

H3: There is an indirect influence of e-mail-use on job satisfaction (substantiated)

# **Correlation Analysis**

The correlation between overall job satisfaction and the satisfaction from the information provided is tested .General overall job satisfaction had high reliability, therefore, we could take an index (satindex) by adding the data of all three items. Pearson r coefficient was r=0.461 and p=0.000 which proved significant positive correlation between the overall job satisfaction and the satisfaction from the provided information.

#### **Discussion**

Studies on e-mail use in organizations have been growing in number in recent years. A major body of research focuses on the factors influencing e-mail use in the organizations. Some of these elaborate on the structural issues of e-mail use in the organization (Sherblom, 1988). Others concentrate on the composing and processing of e-mails (Munter, Rogers, Rymer, 2003). Yet, other studies focus on the theoretical approaches to define the use of communication technologies (Hoof, Groot, Jonge, 2005). Also, some researhers concentrate on the ethical and legal issues arising from the use of e-mail (Moore, 2009). Within the context of the climatic perspective, studies focus on the factor of organizational trust as affected by information flow within the organization (Thomas, Zolin, Hartman, 2009). In our study e-mail use is positioned within the framework of open communication culture. Free flow of information is a reflection of open communication climate in the organization. E-mail use an antecedent of free flow of information is empirically tested via path analysis and is related to job satisfaction. Our findings show that e-mail use supplies a fast and efficient medium for free flow of information, which as a consequence, impacts job satisfaction. In order to conduct this research, we had to develop an "e-mail use" questionnaire. The significance of this questionnaire is that it is a contribution to the literature and methodology for future research on this topic.

The findings supported the main research hypotheses and showed that e-mail use influences the free flow of information and that the free flow of information has an influence on job satisfaction. Results also indicated that e-mail use has an indirect influence on job satisfaction. The three factors of the developed e-mail use questionnaire as the result of the exploratory factor analysis were labelled as F1( e-mail use frequency), F2( freedom of information sharing ) and F3(extend of information quality). The results of the path analysis indicated that the direct path from F1( e-mail use frequency) to information flow was significant (p=0.000)with beta regression weight=0,424 and the direct path from F2( freedom of information sharing ) to information flow was also significant with beta regression weight=0,294. However, F3 (extend of information quality) had no significant influence on information flow. The direct path from info flow to job satisfaction was significant with beta regression weight=0,923. In an environment where information is shared freely and e-mail as a communication channel is frequently used, information flows more effectively in the organization and employees are more satisfied with their jobs. *Communication climate is open when information flows freely; closed when information is blocked ( Buchholz, 1993*).

We have concluded and confirmed that, in organizations where we encounter open communication, information passes in all directions without distortion. Information flows upward, downward and horizontally without a glitch. In these environments, employees can express their opinions, voice complaints, make suggestions, talk among themselves about policy decisions, as well as other aspects of the business.

### **Study Limitations**

In the preliminary data gathering stage, the interview results showed us that the major communication tool in the organization is e-mail use. However, there may be one disadvantage too. If we look at the purpose of correct e-mail, that is to quickly move information onward, which would require quick decision making and taking action, if we get bogged down by reviewing too many e-mails and too much information, this might cut down the efficiency of the system. This concern is based on being consumed by the bombarded by too many unnecessary e-mails. Obstacles to the effective usage of e-mails may be the subject of another study. In this study, the effective usage of e-mails is taken for granted. Accordingly in future studies the e-mail questionnaire developed by the researchers of this study may be further improved and tested on larger number of respondents.

Also, the final modified structural model should be tested in the future with another sample for cross-validity.

#### References

- Brislin, R. (1976). Translation: Application and Research. New York: Wiley
- Byrne, B. M. (2010). Structural Equation Modeling with AMOS. New York: Routledge.
- Bucholz, W. (1993). "Open Communication Climate," guest lecture in Boone and Kurtz's Contemporary Business Communication, Prentice-Hall.
- Case, J. (1998): The Open Book Experience. Reading, MA:Addison-Wesley.
- Ceri-Booms, M. (2009): An Empirical Study on Transactional, Transformational and Authentic Leaders: Exploring the Mediating Role of "Trust in Leader" an Organizational Identification, doctoral dissertation, Yeditepe University.
- Erder, T. (1985): Family in Turkish Society, Ankara: Turkish Social Science Association.
- Fikes, T.L., & Demirel, A.G. (2010). The Impact of Open Communication Climate in Contemporary Organizations. In C. Demir (Ed.), <u>Contemporary Issues in Management and Organizations</u> (p. 85-109). Ankara: Ege University Press.
- Goldhaber, G.M. (1990). Organizational Communication. Dubeque, IA, Wm. C. Brown.
- Hoof, B.V., Groot, T, J., Jonge, S. (2005). Situational Influences on the use of communication Technologies. A Meta-Analysis and Exploratory Study. Journal of Business Communication, 41(2), 4-27.
- Kelloway, E.K. (1998). Using Lisrel for Structural Equation Modeling: A Researcher's Guide. London: Sage Publications.
- Kitapçı, H., Çakar, N, D., Sezen, B. (2005). The Combined Effects of Trust and Employee Identification on Intention to Quit. Elektronik Sosyal Bilimler Dergisi, ISSN: 1304 0278, 3: 33 -41.
- Lee, H., & Choi, B. (2003). KM Enablers, Processes, and Organizational Performance: An Integrative View and Empirical Examination. Ebsco Publishing.
- Livvarçin, Ö. & Tosuner-Fikes, L. (2009). "Çalışan Davranışlarının Analizinde Ücretsiz Gönüllü Fazla Mesai Kavramı Üzerine Ampirik Bir Çalışma", 17 Ulusal Yonetim ve Organizasyon Kongresi Bildiriler Kitabi, Eskisehir Osmangazi Universitesi.
- Moore, J.M., (2009). Your E-mail Trail: Where Ethics Meets Forensics. Business and Society Review, 114 (2), 273-293.
- Munter ,M., Rogers, P.S., Rymer, J. (2003). Business E-mail: Guidelines for Users. Business Communication Quarterly, 66 (1), 26-40.
- Newstrom, J. & Davis, K. (2002). Organizational Behavior, Human Behavior at Work, 11<sup>th</sup> edition, International Edition. Boston: McGraw-Hill.
- Pincus, D. (1986). Communication satisfaction, job satisfaction and job performance. Human Communication Research, Spring, 395-419.
- Redding, W. (1973). Communication within the Organization. New York: Industrial Communication Council.
- Schumacker, R. E., & Lomax, R.G. (2004). A Beginner's Guide to Structural Equation Modeling. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Sherblom, J. (1988. Direction, Function, and Signature in Electronic Mail. The Journal of Business Communication, 25:4.

Thomas, J.F, Zolin, R. Hartman, J. (2009). The Central Role of Communication in Developing Trust and Its Effect On Employee Involvement. Journal of Business Communication, 46 (3).

- Weick, K. (1969). The social psychology of organizing. Reading, MA:Addison-Wesley.
- West, R. & Turner, L. (2003). Introducing Communication Theory, Analysis and Application. Mc Graw Hill.