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EXAMINATION OF EFFECT OF ORGANIZATIONAL EMOTIONAL MEMORY ON ORGANIZATIONAL LEARNING AND FIRM PERFORMANCE

Abstract

There are previous studies in the management literature on the idea that organizational emotional memory is the emotional part of organizational memory and influences firm innovativeness. In this study, the effects of organizational emotional memory on organizational learning and firm performance were examined. For this purpose, a survey was applied to managers of medium and large scale firms in Istanbul and Kocaeli provinces in Turkey in 2018. 622 people from 138 firms participated in the survey. The research found that there is a positive relationship between level, dissemination, storage dimensions of organizational emotional memory and organizational learning and firm performance. In addition, (a) there is a positive correlation between organizational learning and firm performance, (b) it is determined that the organizational learning has a mediating variable effect on the relation between the level, dissemination dimensions of organizational emotional memory and firm performance.

Keywords: Organizational Emotional Memory, Emotional Memory, Organizational Memory, Organizational Learning, Firm Performance

KURUMSAL DUYGUSAL HAFIZANIN ÖRGÜTSEL ÖĞRENME VE FİRMA PERFORMANSINA ETKİSİNİN ARAŞTIRILMASI

Öz

Yönetim literatüründe; kurumsal duygusal hafızanın, kurumsal hafızanın duygusal bölümü olduğu ve firma yenilikçiliğini etkilediği konusunda, önceden yapılmış olan araştırmalar mevcuttur. Bu çalışma ile kurumsal duygusal hafızanın örgütsel öğrenme ve firma performansına olan etkileri deneysel olarak incelenmiştir. Bu maksatla, 2018 yılında İstanbul ve Kocaeli illerindeki orta ve büyük ölçekli firma yöneticilerine anket uygulanmıştır. Araştırmaya, 138 firmadan, 622 kişi katılmıştır. Araştırma ile kurumsal duygusal hafızanın seviyesi, yayılımı ve depolanması boyutları ile örgütsel öğrenme ve firma performansı arasında pozitif bir ilişkinin olduğu saptanmıştır. Ayrıca örgütsel öğrenmenin; (a) firma performansı arasında pozitif bir ilişki olduğu, (b) kurumsal duygusal hafızanın seviyesi ve yayılımı boyutları ile firma performansı arasındaki ilişkide, örgütsel öğrenmenin tam ara değişken etkisinin olduğu tespit edilmiştir.

Anahtar kelimeler: Kurumsal Duygusal Hafıza, Duygusal Hafıza, Kurumsal Hafıza, Örgütsel Öğrenme, Firma Performansı

INTRODUCTION

This study aims to identify the effects of organizational emotional memory on organizational learning in firms and on firm performance.

The study respectively gives place to conceptual and theoretical framework on memory, organizational memory, organizational emotional memory, and organizational learning within the context of existing research in the literature.

Within the scope of the study, a survey was administered to 622 managers of 138 firms in business on the manufacturing and service sectors in 2018. Survey data analysis was carried out on the relations between the sub-dimensions of organizational emotional memory and organizational learning and firm performance. The findings of the data analysis are provided, and suggestions made for future research and firms.

1. Conceptual Framework

1.1. Memory

Preliminary studies on memory were done in the field of philosophy. Whereas, the first scientific study on memory was conducted by Hermann Ebbinghaus. Ebbinghaus primarily examined memory by observations and measurements within the experimental dimension.

Ebbinghaus' research was later confirmed by Jost's studies. In 1897, he introduced the Jost Law, which states that "If two learners are of the same strength, but of different ages, the older one will fall off less rapidly in a given length of time" (Özakpınar, 2012: 28; 47). In Figure 1, two separate learnings of the same strength are given on two separate lines. The front dark-colored bar represents an older learning, while the bar shown in the back represents a newer learning. It is understood from the level of the bars that with the passing of time the newer

learning loses more strength. The strength of newer learnings reduces more and begins to be forgotten more, compared to the older ones.

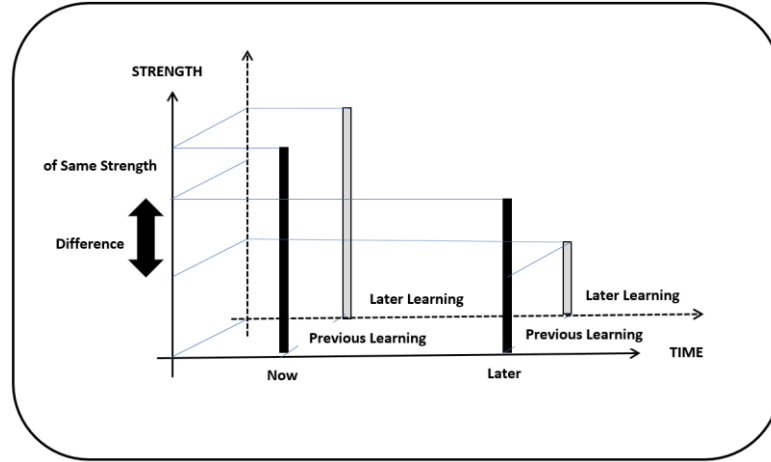


Figure 1. Jost Law

Source: Mert, 2017b: 22, Individual Memory in Organizations.

Memory as a subject matter was dealt within the psychology of perception in the 19th and 20th centuries. However, it has recently been one of the research areas of psychology, neurology and social sciences (Mert, 2017b: 21-22).

“Memory is defined as the ability to remember the past on a conscious or unconscious level (Ganong, 1996).

1.2. The Concept of Organizational Memory and its Categories

Organizational memory is everything done in an organization. Organizational memory is established by exposure partly to collective and individual experiences as well as to public narrative (Schmidt, 2003). All the information, documents and processes related to the past of an organization are the most significant resources it resorts to while forming its organizational future plans. All of these resources constitute the organizational memory of an organization.

Information is vital for organizational success. Drucker (1993) states that information is an important means in organizational production. Bock, Zmud, Kim and Lee (2005) suggest that information is the basic component of the competitive advantage of a firm, and the firm value resting on the knowledge-based view is the key constituent. The ability of a firm to store, convey and expand information significantly affects information creation and the competitive advantage of that firm (Lai et al., 2011: 10493).

The aim is to form an organizational memory with the information from the past, and to pursue the useful memories and not to repeat the mistakes through actions to be taken in the future. It is a means to achieve organizational learning that will later direct productive decisions and operations (Ji and Salvendy, 2001: 129).

In Table 1, differences in organizational and individual interpretations about problems and solutions are given. Coherence in organizational interpretation is possible with sharing of interpretations of matters among individuals. Organizational interpretive system surpasses the

individual level by means of the sharing process. Therefore, organizations should preserve the past information even when the key organizational members leave. The past interpretations are not only settled among individuals, but they are also built-in systems and works (for instance: structures, recyclables, ecology). Organizational memory is a concept that resides both at the individual level and the organizational level (Walsh and Ungson, 1991: 61).

It is clear that categorizations according to various points of view have been made about the types of organizational memory in the relevant literature.

The increasing evidence about the existence of organizational memory show that such memory consists of two types of knowledge: functional and declarative memory. Functional memory refers to process memory or the memory of abilities for conducting tasks. The concept of declarative memory refers to the memory of situations or incidents. Such a memory may consist of information about customer preferences or technical characteristics of the product line of a firm (Moorman and Miner, 1997: 93).

Table 1. Individual Memory and Organizational Memory

SUBJECT	INDIVIDUAL MEMORY (ORGANIC)	ORGANIZATIONAL MEMORY (ORGANIC + BUILT-IN)
Existence	Dependent on individual	Independent of individuals
Problem Solving and Decision Making	- Differs according to individuals. - More efficient.	- Surpasses individual level. - Coherence in interpretations. - Interpretations are formed by the sharing among individuals.
Knowledge Acquisition	Individual	Formed by individual cognitive activities
Place	Individual	Both in individuals and in systems and works
Memory Protection	Individual	Efforts for protection of organic memory and built-in memory.
Memory Level	Individual	Both at individual and collective level. At individual level: incidents, rules, skills. At collective level: Organizational culture, rules, collective beliefs and values.
Memory Concept	Individual.	Both at individual and organizational level.

Source: Mert, 2017c: 79, Organizational Memory.

Another kind of memory content is organizational emotional memory. In terms of giving an exact picture of organizational memory, the fact that the emotional aspect of organizational memory (i.e., emotional memory) should be researched is suggested by Walsh (1995) and

Feldman and Feldman (2006). Akgün et al. (2012a) identified that organizations have emotional memory, and this can be measured. In their study, Akgün et al. (2012b) give the theoretical framework of the emotional memory of organizations.

1.3. Organizational Emotional Memory

Emotions are basic for existence and making life meaningful. Emotions are the basic source for energy of life, providing vital and useful information (Baltaş, 2011: 10). In Latin, emotions are defined as motus anima, “the spirit stirring us”.

In such works as in Hochschild’s *Emotional Labor* (1983) and in Fineman’s *Emotions in Organizations* (1993), the definition of the term “emotion” as “a mental condition that makes an individual feel” drew a great attention in the literature of organizational theory and behavior (Domagalski, 1999). In the studies on emotional labor, it is stated that employees manage their emotions according to expectations of organization and customers (Hochschild, 1983).

The studies on behavior and organizational theory point to the fact that emotions are a part of organizational life and workplace life, because organizations are composed of people and people have emotions (Ashforth and Humphrey, 1995; Domagalski, 1999). Scientists in the field of management (e.g., Fineman, 1993; Rafaeli & Worline, 2001) suggest that there are emotional areas in organizations, and organizations can effectively manage and arrange employees’ emotions. Organizations are a means in expressing, controlling, and maintaining one’s emotions. They direct, increase, and decrease emotions (Levine, 2001).

Organizational memory contents are cognitive components that underlie memory and show existence of memory in organizations (Van Stijn & Wesley, 2001). Organizational memory is not a monolithic concept and it has many dimensions (Walsh and Ungson, 1991; Feldman and Feldman, 2006). The significance of researching the emotional aspect of organizational memory (that is organizational emotional memory) is suggested by Walsh (1995) and Feldman and Feldman (2006). Emotional memory is the memory of emotional incidents and experiences (Akgün et.al, 2012b: 96).

The fact that organizational emotional memory is a sub-dimension of organizational memory was first identified by Akgün et.al (2012a). In previous studies, it was suggested that there is a positive correlation between organizational emotional memory and firm innovativeness (Akgün et.al, 2012a).

According to the psychodynamic research of organizations, emotions are said to be mostly unconscious (Gabriel, 2000). Gabriel and Griffiths (2002) claim that emotions come out of the depth of unconscious processes, and unconscious processes form a series of story categories in order to make a memory base in organizations. Emotional incidents and experiences, are not written. They are spread among employees by means of stories and dialogues. Then, these incidents create an unconscious behavior. And in the course of time the explanation and / or reasoning of this behavior may get lost or just become unconscious. Such psychodynamic processes as stories make emotional memory easy by means of reflection on produced images. In fact, as emotions appear in images (Gabriel and Griffiths, 2002), emotional memory takes the shape of mental images regardless of whether they are remembered consciously or unconsciously.

Organizational emotional memory is defined as the memory of past strong emotional experiences that are unconsciously embedded and shaped in mind for use in present and future activities and in organizational operations (Akgün et.al., 2012b: 99). Emotional memory is de-

defined as accumulation of past emotional experiences and incidents that are fragmental, unconscious and image-based. Indeed, emotions are naturally fragmental, unconscious and image-based (MacKinnon, 1994: 31; as cited in Akgün et al., 2012a: 434) past experiences and incidents. Emotional memory is dependent on its own unique source (fact or fictional), and is expressed as a recall attributed to fragmental past experiences. In this respect, emotional memory refers to the fact that the reason that emerges as an emotional response or that belongs to an incident stimulated by a specific emotional expression is individual or situational (Massey, 2002). An environmental change, economic recession, a meeting, a strike or work stoppage and sales are a key incidents, thus they constitute emotional memory (Mert, 2017c: 94).

To know emotional memory concept and processes helps directors in controlling and guidance, arranging, and directing past emotional incidents in order to perform effectively. Organizational emotional memory building is a multi-dimensional process consisting of value, stimulation and level of past emotional experience (Akgün et.al., 2012b: 107-108). As the value and stimulation of emotional experience are dependent on context, evaluating them differs in terms of innovativeness, decision and learning. It is clear that all information, background and emotions added to organizational emotional memory will not be available there continuously. Emotional memory changes in time like declarative and functional memory. And with regard to this change issue, beneficial and good aspect of emotional memory can be challenging. (Mert, 2017a: 58).

In their study, Akgün et.al (2012a) identified organizational emotional memory dimensions as a multi-dimensional structure by taking Moorman and Miner's (1997) organizational memory study as a basis. As Moorman and Miner (1997) suggest, these are its degree (i.e. the total of accumulated information), its dissemination (i.e. the degree of sharing information in organization) and accessibility (i.e. what information is remembered or available for organization). Akgün et al. (2012a) suggest that there are three premise dimensions of emotional memory. These dimensions enable emotional memory to be measured, and are outcomes or behaviors of emotional memory. These dimensions are given below (Akgün et al., 2012a: 433):

- (1) Emotional experience level (The accumulated amount of the past emotional experiences of an organization.)
- (2) Emotional experience accumulation (The accumulation bucket in which there are past experiences in organization)
- (3) Emotional experience dissemination (The degree of past emotional experiences shared in organization)

1.4. Organizational Learning

The conceptual framework of organizational learning was set forth in the 1940s. However, until Peter Senge's book *The Fifth Discipline* in 1990, such expressions as learning organizations and organizational learning were only in business dictionaries (Taylor et al., 2010: 353).

There are few empirical studies on philosophy, aims and applications of organizational learning in the literature (Cheung et al., 2016: 278). There is no theory or model of organizational learning that is acknowledged by everybody (Fiol and Lyles, 1985: 803). Although the significance of organizational learning is set forth in many studies, and despite passing of years

for describing and explaining organizational learning, its mystery is still unsolved (Taylor et al., 2010: 353).

Organizational learning becomes applicable practically in any organization by focusing the attention of administration on some mechanisms. These mechanisms are a perception ability that interpret, with the accumulated information, the internal and external information, and react to them in order to enable competitive advantage.

Some of the theoretical studies carried on organizational learning are: behavior change mechanisms (Huber, 1991), patterns emerged by interaction, thinking and behavior (Antonopoulou and Chiva, 2007) and organizational memory systems (Walsh and Ungson, 1991). Apart from these, there are such studies as adaptation and adjustment ability embedded in organization (Jacobs and Coghlan, 2005), organizational learning improvement of employees' experiences and expectations (Belle, 2016: 332).

In organizational learning research, it is suggested that organizational learning is a learning that consists all experiences of an organization. However, it has also been discovered that organizational learning is obtained by past unsuccessful experiences and all accumulated past experiences as well. (Madsen and Desai, 2010: 453). Thanks to organizational learning research by Cangelosi and Dill (1965) and Shrivastava (1983); organizational learning came forth with observation and an efficient interpretation (Imran et al., 2016: 234). According to Fiol and Lyles (1985: 803), the systematic reviews done on the literature of strategic management point at an interesting dilemma. Although the significant effect of organizational learning on strategic performance is widely accepted, there is no agreed-upon theory or model of organizational learning. The preliminary studies are on defining, improving and detailing organizational learning and its constituents. Each of these studies approaches organizational learning from different perspectives. According to Madsen and Desai (2010: 453), organizational learning theories are produced from behavioral theories of firms. In parallel with this, decision-makers in organizations take preferences about targets into consideration in decision-making. Preferences divides the performance of an organization as success and failure. The decision-makers identify the performance as success if it surpasses the level of preference; and they identify it as failure if it remains under the level of preference.

The process of organizational learning is a dynamic process including the improvement of organizational knowledge. Organizational learning process passes from individual level to group level, and from there to organizational level, and returns back again (Crossan et al., 1999: 522-537). This process comes forth by undergoing such processes as information acquisition, information dissemination, information interpretation and formation of organizational memory. Environment, structure and technology support this process (Güçlü and Sotirofski, 2006: 364):

(1) Acquisition of Information: Learning starts with information acquisition of organization (Dogdson, 1993). Organization first realizes that its information is missing and insufficient; and in order to fill the deficiency of information, it then goes on to acquire information (Akgün et al., 2009: 97).

(2) Dissemination of Information: The dissemination of information comes after the process of information acquisition. Organizational learning differs from individual learning with dissemination of information and elicitation of a common interpretation from information (Slater and Narver, 1995: 63-74). Organizational learning requires the dissemination of infor-

mation within organization in order to achieve competitive advantage (Jones and Macpherson, 2006: 155).

(3) Interpretation of Information: This phase exhibits the quality of a creative process. Various information is created in the interpretation process. As the existence of different interpretations will increase the potential behaviors of organization, it will contribute to organizational learning (Akgün et al., 2009: 97).

(4) Storage and retrieval of information: Making a map of information is an important activity for a firm. In parallel with information maps, there are technologies that sort and store information as well. Among these, there are databases, document management, content management systems and data storages (Mert, 2017a: 113-114). Understanding and arranging information is significant in terms of keeping it in mind in order to use when needed (Giordian, 2008: 129).

2. Research

In this section, the assumed relations between the variables emphasized in the literature and conceptual framework are explained with theoretical arguments, followed by proposed hypotheses. Subsequently, the findings of structural equation modelling analysis conducted in order to experimentally test the hypotheses are presented.

2.1. Research Modelling and Development of Hypotheses

This study, as shown in the Research Model in Figure 3, aims to research the effects of organizational emotional memory on organizational learning and firm performance. The schematic content of the model is below:

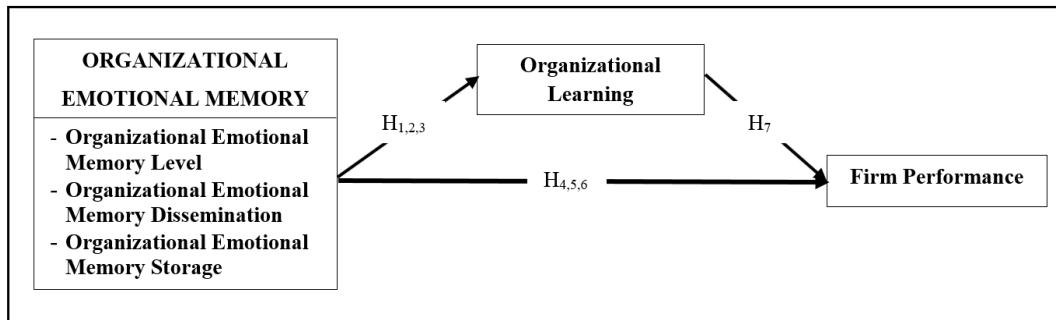


Figure 3. The Research Model

The relations to be researched within the Model and the relevant hypotheses are given below.

2.1.1. The Relation between Organizational Emotional Memory and Organizational Learning

Around a shared vision and culture, an organization should develop new strategies and structures in order to become a learning organization. Robey et al. (2000) defines organizational learning as an intentional or unintentional organizational process which makes acquisition, access and correction of organizational memory possible, and direct organizational action in the end. An organizational memory framework is also constructed by using the logic behind this definition (Ozorhon et al., 2005: 68).

One way of making organizational learning function more easily is to regard it as the development of memory of organization (Cross and Bairdi, 2000: 69-70). Organizational memory

is very important for directing the accumulated information in learning organizations (Weinberger et.al., 2008: 1454). Organizational learning is created by accumulation of information spread through an organization via memory (Rensburg, 2011: 98). Basic functions of organizational memory are: perception, acquisition, distinction, register, storage, retrieval, interpretation and transmission of organizational information (Jennex and Olfman, 2002: 208). Memory and learning processes are complementary processes. Learning is placing information into memory (Mert, 2017a: 157). In the light of these definitions, the following hypotheses were developed:

H₁: There is a positive correlation between organizational emotional memory level and organizational learning.

H₂: There is a positive correlation between organizational emotional memory dissemination and organizational learning.

H₃: There is a positive correlation between organizational emotional memory storage and organizational learning.

2.1.2. The Relations between Organizational Emotional Memory and Firm Performance

Emotionally mature individuals' contribution to firm success is high. Administrators and individuals who are aware of their own emotions and direct them, and pay attention to others' feelings and emotions can create relations based on trust. These individuals can prompt employees for the desired outcome. They enable individual motivation to be high as well so that they can successfully finalize conflicts and problems within the organization (Baltaş, 2011: 50). High performance in firms is ensured by the gathering of firm members around common aims. Administrators should create a culture based on high performance. In creating such an organizational culture, the role of administrator attitudes, firm characteristics and the role of administrative attitudes on organization members are significant (Altınöz, 2009: 97). Emotions serve targets, and they have a function. They do things for individuals (Merlevede et al., 2003: 114). Akgün et al. (2012a) identified that there is a positive correlation between organizational emotional memory and firm innovativeness. And innovativeness leads to an increase in firm performance by providing firms advantageous competition (Boudens, 2005). In parallel with these information, the relevant hypotheses were developed as below:

H₄: There is a positive correlation between the level of organizational emotional memory and firm performance.

H₅: There is a positive correlation between the dissemination of organizational emotional memory and firm performance.

H₆: There is a positive correlation between the storage of organizational emotional memory and firm performance.

2.1.3. The Relations between Organizational Learning and Firm Performance

Nonaka (1994) draws attention to the relation between learning and performance by emphasizing that firms improve their adaptation skills in order to adapt rapidly to consumer expectations and industrial changes. Firms can quickly adapt to the changes in the market by means of organizational learning. A high level of learning enables firms to achieve a more flexible structure than their rivals and to respond more quickly to the changes in the market. Thus, or-

organizational learning is significant in increasing firm performance (Jimenez-Jimenez and Sanz-Valle, 2011).

Explaining the relation between organizational learning and performance with a simple model, Buckler (1998) suggests that organizational learning brings behavior change together with obtaining new information, attitudes and skills, and this may result in improvements in products, services and processes. And the final outcome of all these developments becomes a constant improvement in performance in terms of doing things better in time, or a step-by-step improvement meaning doing better things. Around these explanations, the relevant hypothesis below was developed

H₇: There is a positive correlation between organizational learning and firm performance.

2.1.4. The Role of Organizational Learning in the Relation between Organizational Emotional Memory and Firm Performance

Learning requires an individual to experience cognitive and intuitional processes (Koçel, 2001: 428). Learning means acquisition of knowledge (Terry, 2013: 8). The act of learning leads to the establishment of an equilibrium between determination and change. The stress between determination and change, that is the emotional condition, is a must in order for learning to happen (Fiol and Lyles, 1985).

The permanence of learning is related to memory. Memory and learning processes complement each other. Memory includes such processes as encoding, storing and retrieving information. To symbolize and to encode information are crucial for recalling information. Information is symbolized by two ways. The first way is to transform information into mental pictures and images. The second one is to transform information into verbal symbols. Memory becomes a reconstructed process. Learning is placing information into memory (Mert, 2017a: 164). Memory functions according to three principles: association, imagination and order-structure (Buzan, 1996).

The power of organizational learning necessitates that the phase in which learning is realized, namely encoding phase, be powerful. And this power requires organizational emotional memory to be powerful, as organizational emotional memory is an accumulation of fragmented, unconscious and image-based incidents (Mert, 2017a: 164). As the power of organizational learning increases, its potential outcomes will also increase. The increase in human quality and ability will be improvement in common understanding and recognition structures and improvement in systems, structure, strategies, directions, behavior norms and culture of an organization. And this provides the increase in firm performance (Amiri et al., 2010: 102). Thus, the relevant hypotheses in this sense are given below:

H₈: The organizational learning has a mediating effect on the relation between organizational emotional memory level and firm performance.

H₉: The organizational learning has a mediating effect on the relation between organizational emotional memory dissemination and firm performance.

H₁₀: The organizational learning has a mediating effect on the relation between organizational emotional memory storage and firm performance.

2.2. Research Design

2.2.1. Scales

In the study, in order to test the hypotheses that show the relations between variables forming the conceptual research model developed in accordance with the relevant literature; the scales developed in the studies published in the international literature, validity and reliability of which are verified, were used. In order to measure the variables given in the conceptual model, a total of 55 statements prepared in accordance with 5-item Likert scale were addressed to the participants.

Six statements were for identifying the demographic characteristics of people and firms. In order to measure organizational emotional memory, the scale developed by Akgün et al. (2012a) was utilized. Fourteen statements were for determining organizational emotional memory level, and four statements were for organizational emotional memory dissemination.

In order to measure organizational learning, the statements developed by Jerez-Gómez et al. (2005) were used. 5 statements were for administrative dependence, 3 statements for system perspective, 4 statements for openness and experiencing, and 4 statements for information transfer and integration.

In order to measure firm performance, the scale developed by Akgün et al. (2009) was used. The scale included 15 statements.

2.2.2. Sampling

The population of the research consisted firms operating in the manufacturing and service sectors in the cities of İstanbul and Kocaeli. The aim of conducting the research in the cities of İstanbul and Kocaeli is that this region is central in Turkey for the manufacturing and service sectors. Moreover, this region is the leading region for foreign investors, productive services, wholesale and retail, manufacturing and transportation sectors in terms of finance and real estate. To this end, the firms were determined by taking the data of the “Turkey’s First 500 Large Firms” list published by İstanbul Chamber of Commerce every year, and “ISO Second Big 500 List” as a foundation. From these lists, a list of 203 firms was prepared. Selection of these firms were done according to the criteria in the study by Akgün et al. (2012a: 440):

- (1) Whether they develop new products and export them to other countries (England, Germany, Arab countries, Asia, Russia, etc.)
- (2) Whether they organize and are run according to the Western style of management. For instance, whether they work in accordance with the ISO and the European Quality Standards.
- (3) Whether they merge with international firms
- (4) Whether they employ at least 30 people

The field-study using the survey method was conducted in January-March 2018. For the field-study, 203 firms were contacted and, informed about the study and asked whether could participate.

According to Kumar and Stern (1993), in order to reduce taking information from only one source while conducting the survey, at least two people having the most information about

the activities, culture and employers of the firm were asked to participate. These participants were meant to be the key informers in the firm. As the key informers have the general outlook of the organization, they can give explanatory information about organizational knowledge, past experiences, innovativeness and performance. At the same time, the questionnaire form used in the study included general organization knowledge, skills, emotional experiences and incidents.

It was identified that the majority of the participants are the top-tiers of their positions. The participants have been working in their firms for more than 5 years on average. They all are at least graduates of a high school or a university.

In accordance with the studies of Podsakoff, MacKenzie, Lee and Podsakoff (2003), the participants were informed about the fact that their identities would be hidden, and that no contact would be made with third parties and their firms. Keeping the names anonymous increased the participants' motivation for collaborating without fear of any harm. In addition, it was said that there were no true or false questions, thus answers should be given openly and candidly.

168 firms accepted to participate. A total of 677 participants were reached; 415 people were administered the questionnaire in person, and 262 people filled the questionnaire by phone (CATI). The firms with only one participant and the missing and faulty forms were eliminated. Thus, the data of 138 firms and 622 participants were analyzed.

Of the participants:

- 23.8 % work in the management
- 16.2 % in the manufacturing
- 16.2 % in the Human Resources departments.

Of the participants;

- 4.7 % are department heads,
- 15.6 % product/project managers
- 11.7 % general directors.

In 40.2 % of the firms, there are 2001-and-over personnel.

Of these firms;

- 41.6 % have been operating for 26-50 years
- 32.8 % 51 years and over
- 22.7 % 11-25 years.

In addition, of these firms;

- 75.9 % are in the manufacturing sector
- 24.1 % in the service sector.

2.2.3. Analysis and Results

2.2.3.1. Validity and Reliability of the Scales

The construct validity of the scales were conducted with exploratory factor analysis first. In order to test the convenience of the data set in the organizational emotional memory scale for factor analysis, Kaiser-Meyer-Olkin (KMO) and Bartlett tests were conducted. The KMO value was identified as 0.91, which is higher than the acceptable border 0.70, and Bartlett test result was over 0.50, which is meaningful at the significance level of 0.05; thus, the data set was found to be convenient for factor analysis. The KMO coefficient showed that the data were convenient

for analysis. The statements that remained alone under a factor, and those found to be related with more than one factor were omitted from analysis. In the second factor analysis, 3 factors having eigenvalues 1 and over were obtained. The total variance was found to be 77.4%. The factors were respectively named as “Organizational Emotional Memory Dissemination”, “Organizational Emotional Memory Storage” and “Organizational Emotional Memory Level”.

In the organizational learning scale, the KMO value was over the acceptable border 0.70, a high value as 0.91, and the Bartlett test was over 0.50, which is meaningful at the significance level of 0.05; thus, the data set was found to be convenient for factor analysis. No statement had a sampling adequacy degree under 0.50, no statement remained alone under a factor, no statement was related with more than one factor, and no statement had a factor load under 0.50. In the factor analysis, 3 factors having eigenvalues 1 and over were obtained. The total variance was found to be 78 %. The factors were respectively named as “Administrative Dependence and System Perspective”, “Openness and Experiencing” and “Information Transfer and Integration”.

In the firm performance scale, the KMO value was over the acceptable border 0.70, a high value as 0.91, and the Bartlett test was over 0.50, which is meaningful at the significance level of 0.05; thus, the data set was found to be convenient for factor analysis. The statements that remained alone under a factor, and those found to be related with more than one factor were omitted from analysis. In the factor analysis, only 1 factor having eigen value over 1 was obtained. The total variance was found to be 66.9 %.

After the exploratory factor analysis, the construct validity of the scales was determined also with the confirmatory factor analysis, as a part of structural equation modelling. Each of the statements was meaningfully loaded to its own variable (the lowest t-value 2.50). As a result of the analyses, the indexes obtained were found to provide the fit criteria ($\chi^2=7138.965$, $df=3389$, $\chi^2/df=2.106$, $GFI=0.927$, $CFI=0.986$, $RMSEA=0.073$, $NFI=0.982$). The factor loads are given in Table 2. As seen in Table 2, it is understood that all measurements were over 0.60, in parallel with the suggestion by Hair et al. (2006).

Table 2. CFA – Factor Loads

Variable	F1	F2	F3	F4	F5	F6	F7
Level of Organizational Emotional Memory							
LOEM6	0.613						
LOEM4	0.677						
LOEM3	0.884						
LOEM1	0.845						
Dissemination of Organizational Emotional Memory							
DOEM4		0,856					
DOEM3		0,869					
DOEM2		0,832					
DOEM1		0,814					
Storage of Organizational Emotional Memory							
SOEM14			0,743				
SOEM13			0,787				
SOEM11			0,803				
SOEM10			0,779				

SOEM9			0,761				
SOEM5			0,718				
Administrative Dependence and System Perspective							
AD1				0,796			
AD2				0,794			
AD3				0,837			
AD4				0,818			
AD5				0,840			
SP1				0,866			
SP2				0,853			
SP3				0,859			
Openness and Experiencing							
OE1					0,856		
OE2					0,863		
OE3					0,868		
OE4					0,852		
Information Transfer and Integration							
ITI1						0,850	
ITI2						0,662	
ITI3						0,888	
ITI4						0,713	
Firm Performance							
FP2							0,788
FP3							0,790
FP8							0,608
FP12							0,839
FP14							0,831

In addition, in order to examine the discriminant validity of the variables, the two-factor model suggested by Bagozzi, Yi and Philips (1991) was utilized, and the fit of the restricted models formed by AMOS 22.0 was compared with the original models. By means of the two-factor model, the correlation between all factors is calculated to test the discriminant validity, and is restricted for integrity. The restricted model is compared with the original model in this study, a total of 46 models were developed, and 92 pairs of comparisons were evaluated. Each chi-square change emerged in models ($\Delta\chi^2$) (restricted and free) were found to be statistically significant ($\Delta\chi^2 > 3.84$). And thus, it is possible to say the variables have the discriminant validity.

Table 3. The Reliability Analysis Results of the Scales

Scale	Item Number	Reliability Coefficient	CR	AVE
Organizational Emotional Memory Dissemination	4	0.907	0.907	0.710
Organizational Emotional Memory Storage	6	0.893	0.894	0.586
Organizational Emotional Memory Level	4	0.850	0.845	0.582
Administrative Dependence and System Perspective	8	0.948	0.947	0.694
Openness and Experiencing	4	0.918	0.918	0.739
Information Transfer and Integration	4	0.874	0.845	0.583
Organizational Learning Scale	16	0.946	0.788	0.561
Firm Performance Scale	5	0.962	0.963	0.635

Before continuing with the descriptive values of the variables, the analysis of the relations between the variables and the hypotheses testing; the questionnaire items, the categorizations of which were ascertained by the explanatory and confirmatory factor analyses, were merged in accordance with the results obtained, and were subjected to the reliability analysis. Table 3 shows the results of the reliability analysis results. In the reliability analyses, in calculating the internal consistency, Cronbach's Alpha; average variance extracted (AVE) and AMOS-based composite reliability (CR) values were taken into account. For the convergent validity of the scales, in addition to their factor loads, the CR and AVE values are considered to be important indicators. The fact that the AVE value is over 0.50 and the CR value is over 0.70 is crucial for ensuring the convergent validity (Hair et al., 2006). Moreover, the CR values being larger than the AVE values can be said to offer additional proof (Byrne, 1994). It is observed that all the values are over or near to the reliability values suggested by Nunnally (1978) and Fornell and Larcker (1981). The criterion that the CR values should be higher than the AVE values was ensured in all the dimensions. These findings show that the scales have sufficient reliability and discriminant validity.

2.2.3.2. Correlation Analysis

Table 4 shows the correlation coefficients of the relations between the variables and the descriptive statistical findings of the variables. The correlation analysis in Table 4, gives an idea about the direction and the strength of the relations of the variables. All the variables have positive correlations with each other at the significance level of 0.01.

Table 4. Correlation Analysis (n=622)

Variables	Avr.	Sd	1.	2.	3.	4.	5.	6.	7.	9.
1. EM Level	3.79	0.87	1							
2. EM Dissemination	3.82	0.88	.515**	1						
3. EM Storage	3.68	0.86	.734**	.613**	1					
4. ADSP	3.82	0.89	.517**	.685**	.617**	1				
5. OE	3.85	0.90	.507**	.742**	.610**	.681**	1			
6. ITI	3.77	0.89	.769**	.507**	.713**	.512**	.502**	1		
7. OL	3.82	0.76	.731**	.764**	.745**	.731**	.735**	.735**	1	
9. FP	3.82	0.81	.547**	.821**	.642**	.711**	.721**	.548**	.743**	1

** Pearson correlation, significant at p<0.01 level.

2.2.3.3. Testing Hypotheses

In order to test the hypotheses, the structural equation modelling was conducted with the AMOS program. It was hypothesized that the factors in the research model (organizational emotional memory level, organizational emotional memory dissemination, organizational emotional memory storage, administrative dependence and system perspective, openness and experiencing, information transfer and integration, organizational learning and firm performance) and the causal relations between these factors could be explained.

2.2.3.3.1. Basic Model Analysis

Table 5 shows that the conceptual model is compatible with the data. The CFI, GFI and NFI values are at an acceptable level. The chi-square and the degrees of freedom rate are lower than 5 ($\chi^2/df=2.107$). The RMSEA value being lower than 0.05 shows a high fit.

Table 5. Path Analysis Results of Hypotheses Testing

Hypotheses	Path	Path Values	Result
H ₁	OEM Level → Organizational Learning	.331***	Supported
H ₂	OEM Diss. → Organizational Learning	.714***	Supported
H ₃	OEM Storage → Organizational Learning	.655***	Supported
H ₇	OEM Level → Firm Performance	.616***	Supported
H ₈	OEM Diss. → Firm Performance	.768***	Supported
H ₉	OEM Storage → Firm Performance	.296***	Supported
H ₁₀	Organizational Learning → Firm Perfor.	.854***	Supported
X ² =4056.143, df=1925, x ² /df=2.107, CFI=0.928, GFI=0.910, NFI=0.891, RMSEA=0.041			

** p<0.05, *** p<0.01

In hypothesis H₁ developed for the relation between organizational emotional memory level and organizational learning, it is observed that there is a positive correlation between organizational emotional memory level and organizational learning ($\beta=.33$ p<.01). Thus, hypothesis H₁ is supported.

In hypothesis H₂, it is observed that there is a positive correlation between organizational emotional memory dissemination and organizational learning ($\beta=.71$ $p<.01$). Thus, hypothesis H₂ is supported.

In hypothesis H₃, it is observed that there is a positive correlation between organizational emotional memory storage and organizational learning ($\beta=.65$ $p<.01$) Thus, hypothesis H₃ is supported.

In hypothesis H₇ developed for the relation between organizational emotional memory level and firm performance, a positive correlation was found between the two ($\beta=.61$ $p<.01$), thus hypothesis H₇ is supported.

In hypothesis H₈, it is observed that there is a positive correlation between organizational emotional memory dissemination and firm performance ($\beta=.76$ $p<.01$). Therefore, hypothesis H₈ is supported.

And in hypothesis H₉, it is seen that there is a statistically significant positive correlation between organizational emotional memory storage and firm performance ($\beta=.29$ $p<.01$). This result supports hypothesis H₉.

In hypothesis H₁₀, it is identified that there is a statistically significant positive correlation between organizational learning and firm performance ($\beta=.85$ $p<.01$). Thus, the hypothesis H₁₀ is supported.

2.2.3.3.2. Analysis of the Effect of the Mediating Variable

The mediating effect of organizational learning on the relations between organizational emotional memory level, organizational emotional memory dissemination, organizational emotional memory storage and firm performance was tested by following the procedure suggested by Baron and Kenny (1986). To this end, three different SEM models shown in Table 6 were developed. Thus:

1) On examining Model A consisting of organizational emotional memory level, organizational emotional memory dissemination, organizational emotional memory storage (X) and firm performance (Y); it is observed that the variables of organizational emotional memory dissemination ($\beta=.65$, $p<.01$) and organizational emotional memory storage ($\beta=.57$, $p<.01$) are correlated with firm performance ($R^2_{(firmperf)}=.36$). However, no meaningful correlation was found between organizational emotional memory level ($\beta=.33$, $p>.01$) and firm performance.

2) In Model B consisting of organizational emotional memory level, organizational emotional memory dissemination, organizational emotional memory storage variables (X) and organizational learning (M), it is understood that the organizational emotional memory level ($\beta=.94$, $p<.01$) organizational emotional memory dissemination ($\beta=.83$, $p<.01$) are positively correlated with organizational learning ($R^2_{(öö)}=.28$). However, there is no statistically significant correlation between organizational emotional memory storage ($\beta=.31$, $p>.01$) and organizational learning.

3) And in Model C, after taking the variables of organizational emotional memory level, organizational emotional memory dissemination, organizational emotional memory storage under control, it is identified that organizational learning ($\beta=.61$, $p<.01$) is positively correlated with firm performance. Organizational learning eliminates the effects of organizational emotional memory level, organizational emotional memory dissemination, organizational emotional

memory storage, and the inclusion of organizational learning into the model increases the R² of firm performance (R²=.49).

According to Table 6; organizational learning has the full mediating variable effect on the relation between organizational emotional memory level and firm performance. Thus, hypothesis H₁₂ is supported.

Table 6. Mediating Variable Effect

Relation	Model A	Model B	Model C
OEM Level → Firm Performance	.332		.197
OEM Diss. → Firm Performance	.654***		.465
OEM Storage → Firm Performance	.573***		.318***
OEM Level → Organizational Learning		.943***	.731***
OEM Diss. → Organizational Learning		.830***	.603***
OEM Storage → Organizational Learning		.314	.212
Organizational Learning → Firm Perf.		.703***	.613***
	x ² =903.443 df=375 x ² /df=2.409 CFI=0.921 GFI=0.879 NFI=0.871 RMSEA=0.064	Full Model	x ² =2328.850 df=1194 x ² /df=1.950 CFI=0.944 GFI=0.932 NFI=0.874 RMSEA=0.032

** p<0.05, *** p<0.01

Organizational learning has a full mediating variable effect on the relation between organizational emotional memory dissemination and firm performance. Thus, hypothesis H₁₃ hypothesis is supported.

Organizational learning does not have a mediating variable effect on the relation between organizational emotional memory storage and firm performance. Thus, hypothesis H₁₄ is not supported.

Discussion and Conclusion

In this study, the relation between organizational emotional memory and organizational learning was examined, and the effects of these phenomena on firm performance were identified. With the evaluation of the data obtained from 622 individuals, it was determined that (1) organizational emotional memory level, dissemination and storage are positively related with organizational learning, (2) organizational emotional memory level, dissemination and storage are positively related with firm performance, (3) there is a positive correlation between organizational learning and firm performance, (4) organizational learning has a full mediating variable effect on the relations between organizational emotional memory level and dissemination and firm performance.

On examining the relations between organizational emotional memory level, dissemination and storage and organizational learning, it is observed that these concepts are positively correlated. According to Yeo (2007); organizational emotional experiences tell individuals what

kind of a perception they can create. They also provide a better analysis, understanding of a given condition, and determine individual behaviors by directing individual activities. Akgün et al. (2012b) suggest that organizational emotional memory integrates and improves organizational memory. According to the studies by Daniel Kahneman, people do not make their decisions within a broad perspective, in a planned manner and reasonably; but rather they make them according to their short-term experiences and emotional modes. There is also an important relation between organizational emotional memory and the declarative and functional memory of an organization (Akgün et al., 2012a). Learning is realized by recording information into memory, if there is no recall, there is no learning (Mert, 2017a: 194). Thus, the fact that with the increase of emotional memory, organizational memory and organizational learning also increase is supported in the literature.

Organizational emotional memory dissemination means the level and degree of organizational members' sharing emotional experiences and incidents with each other. Information, perceptions and emotions emerging with this sharing are used individually or collectively (Küpers, 2005). Moreover, these emotions continue with reciprocal conversations (Vince and Saleem, 2004). The fact that Organizational emotional memory dissemination leads to the increase of organizational emotional memory, and thus to the increase of organizational memory and learning.

Organizational emotional memory storage means the accumulation bucket in which are emotional experiences of an organization (Akgün et al., 2012a). The storage of emotional experiences are present in individuals, social activities and non-human elements. The non-human elements shape and strengthen the behavior patterns in an organization. They also create new information, meanings, ideals, concepts; and trigger the powerful emotions (Zachry, 2005). It is suggested in the literature that the increase in organizational emotional memory storage increases organizational memory and learning.

On examining the relations between organizational emotional memory level, dissemination and storage and firm performance, it is observed that these concepts are positively correlated. Organizational emotional memory helps administrators in control and administration, organizing and showing an efficient performance (Akgün et al., 2012b: 107-108). Organizational emotional experiences sets forth the issues of market, customer and technology; shows individuals the ways of success in their activities (Boje, 1991; Gabriel, 1995). Organizational emotional experiences, that is stories about past successful production and tasks, provide reasonable solutions for incidents in the needs and targets of the project-team in the task of developing a new product (Boudens, 2005). Organizational emotional memory puts forth the method of doing things, and this is the fact that the organization members understand what is required for achieving project targets, and the sharing of the information how they can achieve the utmost success and performance among the team members (Fiol, 1994: 404). Thus, as organizational emotional memory level, dissemination and storage increase, firm performance also increases.

As a result of the study, it is observed that there is a positive correlation between organizational learning and firm performance. This finding is in parallel with many such empirical studies as by Jian and Hailin (2010), Di Milia and Birdi (2010), Papatya et al. (2008), Jimenez-Jimenez and Cegarra-Navarro (2007), Garcia-Morales et al. (2006) and Khandekar and Sharma (2006). Based on these findings, as the level of organizational learning of firms increases, so does their performance levels.

It was understood that organizational learning has no mediating variable effect on the relation between organizational emotional memory storage and firm performance. In the literature, this situation is explained with the condition of activation of organizational emotional memory. According to Cacioppo and Gardner (1999)'s emotional activation conditions, there is a neutral condition in organizational emotional memory storage. That is, the stimulation and valence of organizational emotional memory is neutral. In other words, organizational emotional memory is not alive for use in the phase of storage. The relations of organizational emotional memory depend on stimulation and valence, that is, such memory characteristics as aliveness and trueness (Conway, 2005; as cited in Akgün et al., 2012b: 106). Thus, it is seen that organizational learning does not have a mediating variable effect on the relation between organizational emotional storage and firm performance.

Limitations and Future Research

This study was conducted on Turkish and foreign/multinational firms in the cities of İstanbul and Kocaeli in 2018. The fact that the study was not conducted in the national and international context is an important limitation for generalization. However, according to the TSI 2014 data, of Turkey's total GNI, İstanbul represents 30.5%, and Kocaeli 3.6% (www.tuik.gov.tr). At the same time, according to the export figures of November 2017, of Turkey's total export performance; İstanbul represents 42.5%, and Kocaeli 8.5% (www.tim.org.tr). In this regard, İstanbul and Kocaeli provinces provides the Turkish economy an added-value at a rate of 34.1% in GNI in total, and 51% in export in total. It can be said that the study done in these provinces can be generalized partly for Turkey, and mostly for the Marmara region. It will be useful for researchers to take these conditions into account while generalizing the results of the study in different regions and countries,

Moreover, on the sector base, more detailed research can be done especially the limited areas where technology is more extensive. In this sense, sectors are an important limitation.

Such issues as psychological factors (motivation, attention, interpretation), social, cultural and technical aspects of organizational context (social relations, identity, etc.) and how much organizational design elements ease and limit the use and formation of organizational emotional memory should be researched. There is also need for researching such issues as use of information technology for improvement and protection of organizational emotional memory and use of organizational emotional memory.

The most important contribution of this study to the literature on organizations is the empirical verification of the positive correlation between organizational emotional memory and organizational learning, and the result that these concepts increase firm performance. The examination of the relations between organizational emotional memory, organizational learning and firm performance in the context of organizations operating in different industries may lead to beneficial results. This kind of an approach can especially provide a comparison between sectors. Moreover, such relations as innovativeness, leadership, organizational dependence, organizational culture, etc. can be a subject of future research.

Organizational and Administrative Applications

The study has many beneficial results for the profit of firms. Administrators and employees should be aware of various and intense emotional experiences and should take these under control and use them for the benefit of organization.

Directing and sharing of emotions in organization points at encouraging learning more and achieving a better performance.

In order for administrators to improve organizational information base and applications, they should reconstruct their workplace in a manner in which employees can share their emotional experiences with each other. To this end, administrators should encourage interpersonal relations, ensure social interaction, and create an equalitarian dialogue atmosphere in organization in which everybody can easily voice their emotions. Administration should conduct such activities as regular meetings in organization, celebrating the foundation-day of firm, arranging monthly dinners or lunch, and labor-day picnics. People experience more emotions by participating organizational meetings. The more the emotional memory of an organization is clear and shared among human resources, the more that organization becomes successful.

In order for organizational emotional memory to be formed and to be efficient, the turnover rate of human resources should be low. Human resources selection is highly effective on organizational emotional memory. Upon looking at organizational emotional memory, it is clear that not machines but human resources are the basic element of production.

REFERENCES

- Akgün, A. E.; Keskin, H. and Günsel, A., (2005), Örgütsel Hafıza ile Enformasyon Teknolojileri (IT) Arasındaki İlişkiler (The Relationships Between Organizational Memory And Information Technologies (IT)), Celal Bayar University, Faculty of Economics and Administrative Sciences, Management and Economics, Volume: 12, Number: 2, p. 1-16.
- Akgün, A.; Keskin, H. and Byrne, J., (2012a), The Role of Organizational Emotional Memory on Declarative and Procedural Memory and Firm Innovativeness, Product Development & Management Association, 29(3), p. 432-451.
- Akgün, A.; Keskin, H. and Byrne, J., (2012b), Organizational Emotional Memory, Management Decision, Vol. 50, No. 1, p. 95-114.
- Altınöz, M., (2009), Yetenek Yönetimi (Skill Management), Nobel Publishing, 1st Edition, October.
- Amiri, A.; Jandghi, G.; Alvani, S.; Hosnavi, R. and Ramezan, M., (2010), Increasing the Intellectual Capital in Organization: Examining the Role of Organizational Learning, European Journal of Social Sciences, Volume 14, Number 1, p. 98-108.
- Antonocopoulou, E. and Chiva, R., (2007), The Social Complexity of Organizational Learning: The Dynamics of Learning and Organizing, Management Learning, Vol. 38, No. 3, p. 277-295.
- Ashforth, B. E. and Humhrey, R. H., (1995), Emotion in the Workplace: A Reappraisal, Human Relations, Vol. 48, No. 2, p. 97-125.
- Ashforth, B. E. and Kreiner, G. E., (2002), Normalizing Emotion in Organizations: Making The Extraordinary Seem Ordinary, Human Resource Management Review, Vol. 12, p. 215-35.
- Bagozzi R., Yi Y. and Phillips L. W., (1991), Assessing Construct Validity in Organizational Research, Administrative Science Quarterly, 36 (3), 421-458.

- Baltaş, Z., (2011), Duygusal Zekâ (Emotional Intelligence), Remzi Bookstore, Edition 4, May.
- Baron R. and Kenny D., (1986), The Moderator-Mediator Variable Distinction in Social Psychological Research, *Journal of Personality and Social Psychology*, 51 (6), 1173- 1182.
- Belle, S., (2016), Organizational Learning? Look Again, *The Learning Organization*, Vol. 23 No. 5, p. 332-341.
- Boje, D. M., (1991), Learning Storytelling: Storytelling to Learn Management Skills, *Journal of Management Education*, Vol. 15, p. 279-294.
- Boudens, C. J., (2005), The Story of Work: a Narrative Analysis of Workplace Emotion, *Organization Studies*, Vol. 26, p. 1285-306.
- Bucci, W., (2001), Pathways of Emotional Communication, *Psychoanalytic Inquiry*, Vol. 21 No. 1, p. 40-70.
- Buckler B., (1998), Practical Steps Towards a Learning Organization: Applying Academic Knowledge to Improvement and Innovation in Business Process, *The Learning Organization*, 5(1), p. 15-23.
- Buzan, T. and Keane, R., (1996), *Dehanın El Kitabı, Çeviren: Sinem Gül, Sabah Kitapları Çeşitlemeler Dizisi, İstanbul.*
- Byrne B. M., (1994), *Structural Equation Modeling with EQS and EQS/Windows*, Thousand Oaks, CA: Sage Publications.
- Cacioppo, J. T. and Gardner, W. L., (1999), Emotion, *Annual Review of Psychology*, Vol. 50, p. 191-214.
- Callahan, J. L., (2004), Reversing a Conspicuous Absence: Mindful Inclusion of Emotion in Structuration Theory, *Human Relations*, Vol. 57, p. 1427-48.
- Cheung, C. K.; Geng, S.; Chuah, K. B.; Chau, Y. C. ve Kwong, K. F., (2016), Organizational Learning in Shop Floor Level, *The Learning Organization*, Vol. 23 No. 5, p. 274-298.
- Cross, R. and Baird, L., (2000), Technology Is Not Enough: Improving Performance by Building Organizational Memory, *Sloan Management Review*, p. 69-78, Spring.
- Crossan, M. M.; Lane, H. W. and White, R. E., (1999), An Organizational Learning Framework: From Intuition to Institution, *Academy of Management Review*, 24(3), p. 522-537.
- Di Milia, L and Birdi, K., (2010), The Relationship Between Multiple Levels of Learning Practices and Objective and Subjective Organizational Financial Performance, *Journal of Organizational Behavior*, Vol. 31, p. 481-498.
- Dodgson, M., (1993), Organizational Learning: A Review of Some Literatures, *Organization Studies*, 14, p. 375-394.
- Domagalski, T. A., (1999), Emotion in Organizations: Main Currents, *Human Relations*, 52, 6; *Human Relations*, p. 833-852, June.
- Feldman, R. M. and Feldman, S. P., (2006), What Links The Chain: an Essay on Organizational Remembering as Practice, *Organization*, Vol. 13, p. 861-887.
- Fineman, S., (1993), *Emotion in Organizations*, London: Sage.

- Fiol C. M. and Lyles M. A., (1985), Organizational Learning, *Academy of Management Review*, 10: 4, p. 803-813.
- Fiol, C. M., (1994), Consensus, Diversity, and Learning in Organizations, *Organization Science* 5, p. 403-420.
- Fornell C. and Larcker D. F., (1981), Evaluating Structural Equation Models With Unobservable Variables and Measurement Error, *Journal of Marketing Research*, 18 (1), 39-51.
- Gabriel, Y. and Griffiths, D., (2002), Emotion, Learning and Organizing, *The Learning Organization*, Vol. 9, p. 214-229.
- Gabriel, Y., (1995), The Unmanaged Organization: Stories, Fantasies and Subjectivity, *Organization Studies*, Vol. 16, p. 477-501.
- Gabriel, Y., (2000), Psychoanalytic Contributions to the Study of the Emotional Life of Organizations, *Administration and Society* 30: 291-314.
- Ganong, W. F., (1996), Tıbbi Fizyoloji. Göksel H. Sinir Sisteminin Yüksek Fonksiyonları: Şartlı Refleksler, Öğrenme ve İlişkili Olaylar (Medical Physiology. High Functions of the Nervous System: Conditional Reflexes, Learning and Related Events), Barış Bookstore, Volume 1, Issue 17, p. 329-333.
- Garcia-Morales, V. J.; Liorens-Montes, F. and Verdu-Jover, A., (2006), Antecedents and Consequences of Organizational Innovation and Organizational Learning in Entrepreneurship, *Industrial Management Data Systems*, 106(1/2), p. 21-42.
- Giordan, A., (2008), Öğrenme (Learning), Translated: Mehmet Baştürk, Ebubekir Bozavlı and Murat Tulan, De Ki Printing, 1st Edition.
- Güçlü, N. and Sotirofski, K., (2006), Bilgi Yönetimi (Knowledge Management), *Journal of Turkish Educational Sciences*, Fall, 4(4), p. 351-371.
- Hair J. F.; Black W. C.; Babin B. J.; Anderson, R. E. and Tatham R. L., (2010), *Multivariate Data Analysis with Readings*, 6th edition, Prentice-Hall, Englewood Cliffs, NJ.
- Hamann, S., (2001), Cognitive and Neural Mechanisms of Emotional Memory, *Trends in Cognitive Sciences*, Vol. 5, p. 394-400.
- Hochschild, A. R., (1983), *The Managed Heart: Commercialization of Human Feeling*, University of California Press, Berkeley, CA.
- Huber, G. P., (1991), Organizational Learning: The Contributing Processes and The Literatures, *Organization Science*, 2, 1, p. 88-112.
- Imran, M. K.; Ilyas, M.; Aslam, U. and Ur-Rahman, U., (2016), Organizational Learning Through Transformational Leadership, *The Learning Organization*, Vol. 23 No. 4, p. 232-248.
- Export Numbers, <http://www.tim.org.tr/tr/ihracat-rakamlari.html> Date of Access: 11.12.2017
- Gross Domestic Product by Cities, 2004-2014, <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=24920>, Date of Access: 11.12.2017
- Jacobs, C. and Coghlan, D., (2005), Sound From Silence: On Listening in Organizational Learning

- ning, Human Relations, Vol. 58, No. 1, p. 115-138.
- Jennex, M. E. and Olfman, L., (2002), Organizational Memory, Handbook on Knowledge Management, Edited by C. W. Holsapple, Springer, Berlin - Heidelberg, p. 207-234,.
- Jerez-Gómez, P.; Céspedes-Lorente, J. and Valle-Cabrera, R., (2005), Organizational Learning Capability: A Proposal of Measurement, Journal of Business Research 58: 715– 725.
- Ji, Y. G. and Salvendy, G., (2001), A Framework for Improving Organizational Learning Through a User-Adaptive Intranet Portal Organizational Memory Information System, The International Journal of Aviation Psychology, 11(2), p. 123–148.
- Jian, Y. and Hailin, L., (2010), The Moderating Role of Organizational Learning in the Relationship between Organizational Innovation and Performance, The 4th International Congerence on Management and Service Science, August 24-26, Wuhan, China.
- Jimenez-Jimenez, D. and Cegarra-Navarro, J. G., (2007), The Performance Effect of Organizational Learning and Market Orientation, Industrial Marketing Management, 36(6), p. 694-708.
- Jimenez-Jimenez, D. and Sanz-Valle R., (2011), Innovation, Organizational Learning, and Performance, Journal of Business Research, 64(4), p. 408-417.
- Jones, O. and Macpherson, A., (2006), Inter-Organizational Learning and Strategic Renewal in SMEs», Long Range Planning 39, p. 155-175.
- Khandekar, A. and Sharma, A., (2006), Organizational Learning and Performance: Understanding Indian Scenario in Present Global Context, Education Training, 48(8/9), p. 682-692.
- Kingston, J. and Macintosh, A., (2000), Knowledge Management Through Multi-Perspective Modelling: Representing and Distributing Organizational Memory, Knowledge-Based Systems 13, p. 121–131.
- Koçel, T., (2001), İşletme Yöneticiliği (Business Administration), 2nd Edition, Beta Publishing, Istanbul.
- Kumar, N. and Stern, L. W., (1993), Conducting Interorganizational Research Using Key Informants, Academy of Management Journal 36, p. 1633–1651.
- Küpers, W., (2005), Phenomenology of Embodied Implicit and Narrative Knowing, Journal of Knowledge Management 9, p. 114–234.
- Lai, M. C.; Huang, H. C.; Lin, L. H. and Kao, M. C., (2011), Potential of Organizational Memory for Creating Service Performance: A Cross-Level Analysis, Expert Systems with Applications 38, p. 10493–10498.
- Levine, D. P., (2001), The Fantasy of Inevitability in Organizations, Human Relations 54, p. 1251–1265.
- Madsen, P. and Desai, V., (2010), Failing to Learn? The Effects Of Failure and Success on Organizational Learning in The Global Orbital Launch Vehicle Industry, Academy of Management Journal, Volume 53, No. 3, p. 451–476.
- Massey, D. S., (2002), A Brief History of Human Society: The Origin and Role of Emotion in

- Social Life, American Sociological Review, Vol. 67, p. 1-29.
- Merlevede, P. E.; Vandamme, R. and Bridoux, D., (2006), 7 Adımda Duygusal Zekâ, Çeviren: Tuğba Kırca, Omega Yayınları, İstanbul.
- Mert, G., (2017a), Kurumsal Duygusal Hafıza İle Örgütsel Öğrenme, Firma Yenilikçiliği ve Firma Performansı Arasındaki İlişkiler (The Relationships Between Organizational Emotional Memory and Organizational Learning, Firm Innovation, Firm Performance), Unpublished Doctoral Thesis, Beykent University, Social Sciences Institute, İstanbul.
- Mert, G., (2017b), Organizasyonlarda Bireysel Hafıza (Individual Memory in Organizations), Artikel Publications, 1st Edition, October, İstanbul.
- Mert, G., (2017c), Kurumsal Hafıza (Organizational Memory), Artikel Publications, 1st Edition, October, İstanbul.
- Moorman, C. and Miner, A. S., (1997), The Impact of Organizational Memory on New Product Performance and Creativity, Journal of Marketing Research, Vol. XXXIV, p. 91-106, February.
- Nonaka, I., (1994), A Dynamic Theory of Organizational Knowledge Creation, Organization Science, 5(1), p. 14-37.
- Nunnally, J. C., (1978), Psychometric Theory, New York: McGraw-Hill.
- Ozorhon, B.; Dikmen, I. and Birgonul, T., (2005), Organizational Memory Formation and its Use in Construction, Building Research & Information, 33(1), p. 67-79, January-February.
- Özakpınar, Y., (2012), Hafıza (Memory), Ötüken Neşriyat A. Ş., 3rd Edition, İstanbul.
- Papatya, N.; Papatya, G. and Hamşioğlu, A. B., (2008), Yenilik, Pazar Yönlülük ve Örgütsel Öğrenmenin İşletme Performansına Etkisi: Tekstil Sektöründe Faaliyet Gösteren Bir İşletmede Araştırılması (Innovation, Market Orientation and Impact of Organizational Learning on Business Performance: Investigation into a Business Operated in Textile Sector), Hitit University, 7th Anatolian Business Congress, Çorum, 8-10 May, p. 463-476.
- Paper, D. and Johnson, J. J., (1997), A Theoretical Framework Linking Creativity, Empowerment, and Organizational Memory, Creativity and Innovation Management, Volume 6, Number 1, March.
- Podsakoff, P. M.; MacKenzie, S. B.; Lee, J. Y. and Podsakoff, N. P., (2003), Common Method Bias in Behavioral Research: A Critical Review of The Literature and Recommended Remedies, Journal Applied Psychology 88, p. 879-903.
- Rensburg, M. S., (2011), Using Organizational Memory Directories to Analyze Networks, Really New Directions in Evaluation, No: 131, p. 97-102, Fall.
- Schmidt, D. E., (2003), Political Influence and Policy Variation: Understanding The Politics of Field Administration, Administration & Society, Vol. 35 No. 3, s. 279-314.
- Slater, S. F. and Narver, J. C., (1995), Market Orientation and the Learning Organization, Journal of Marketing, 59(3), p. 63-74.

- Taylor, S.; Templeton, G. and Baker, L., (2010), Factors Influencing the Success of Organizational Learning Implementation: A Policy Facet Perspective, *International Journal of Management Reviews*, Vol. 12, p. 353–364.
- Terry, S., (2013), *Öğrenme & Bellek Temel İlkeler, Süreçler ve İşlemler (Learning & Memory Basic Principles, Processes and Operations)*, Translated: Banu Cangöz, Hasan Bahçekapılı, Aydan Aydın, Levent Şenyüz, Gökhan Malkoç, Mine Mısırlısoy, Sonia Amado, Ali Tekcan, Emre Özgen ve Sait Uluç, Anı Publishing, 3. Edition.
- Van Stijn, E. and Wensley, A., (2001), Organizational Memory and the Completeness of Process Modeling in ERP Systems, *Business Process Management 7*: 181–194.
- Vince, R. and Saleem, T., (2004), The Impact of Caution and Blame on Organizational Learning, *Management Learning*, Vol. 35, p. 133-155.
- Walsh, J. P. and Ungson, G. R., (1991), Organizational Memory, *Academy of Management Review*, Vol. 16, No. 1, p. 57-91.
- Walsh, J. P., (1995), Managerial and Organizational Cognition: Notes From a trip Down Memory Lane, *Organization Science* 6, p. 280–321.
- Weinberger, H.; Te'eni, D. and Frank, A. J., (2008), Ontology-Based Evaluation of Organizational Memory, *Journal of the American Society for Information Science and Technology*, 59(9), p. 1454–1468.
- Yeo, R. K., (2007), (Re)viewing Problem-Based Learning: An Exploratory Study on the Perceptions of its Applicability to the Workplace, *Journal of Managerial Psychology*, Vol. 22, p. 369-391.
- Zachry, M., (2005), An interview with Donald A. Norman, *Technical Communication Quarterly*, Vol. 14, p. 469-488.