# A RESEARCH ON DETERMINATION OF THE ORGANIZATIONAL HEALTH PERCEPTIONS OF THE EMPLOYEES WORKING IN KARDEMIR INC.*

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**Abstract**

Organizational health is a concept that includes concepts such as organizational effectiveness, organizational culture, organizational commitment, organizational climate, and more broadly. Healthy organizations are institutions where employees participate in governance, problems are solved through co-operation, and employees benefit from their expertise. Organizational health is a product of employee-based approaches following the decentralized approach of the 1950s and 1960s. This concept, which was first used in analyzes to measure the effectiveness of schools, has gradually evolved into a concept of importance for efficiency, competition and change in all organizations. The aim of this study is to determine the level of organizational health of Kardemir Inc. employees, which operates in the iron and steel sector, and to reveal the relation between organizational health and demographic variables. For this purpose, data were obtained using the survey method of the employees working in the business. A sample of 500 employee questionnaires were administered, of which 450 were validated and analyzed. The t-test and one-way analysis of variance (ANOVA) were used to determine the validity of the research hypotheses. As a result of the study, there were significant differences according to employees' perception of organization health, sex, age, education status, professional experience and stage. However, it was determined that there was no significant difference between the marital status and the duration of the employment.

**Key Words:** Organizational Health, Healthy Organization, Unhealthy Organization, Kardemir Inc.

# KARDEMİR A.Ş. ÇALIŞANLARININ ÖRGÜT SAĞLIĞI ALGILARINI BELİRLEMEYE YÖNELİK BİR ARAŞTIRMA

**Özet**

Örgüt sağlığı; örgütsel etkinlik, örgüt kültürü, örgütsel bağlılık, örgüt iklimi gibi kavramları içine alan ve bunlardan daha geniş anlamlar içeren bir kavramdır. Sağlıklı örgütler çalışanların yönetime katıldığı, karşılaşılan problemlerin işbirliği yoluyla çözüldüğü, çalışanların uzmanlıklarından istifade edildiği kurumlardır. Örgüt sağlığı 1950 ve 1960'lı yılların merkeziyetçi yaklaşımının ardından gelen ve çalışanı merkeze alan yaklaşımların bir ürünüdür. İlk olarak okulların etkinliğini ölçmek için yapılan analizlerde kullanılmış olan bu kavram, zamanla tüm örgütlerde etkinlik, rekabet ve değişim için önem arzeden bir kavrama dönüşmüştür. Bu çalışmanın amacı, demir çelik sektöründe faaliyet gösteren Kardemir A.Ş.'nin örgüt sağlığı düzeyini belirlemek ve örgüt sağlığının demografik değişkenlerle ilişkisini ortaya çıkarmaktır. Bu amaç kapsamında, işletmede çalışan personelden anket yöntemi kullanılarak veriler elde edilmiştir. Örneklem olarak seçilen 500 çalışana anket uygulanmış, bunlardan 450

* This work was supported by Research Fund of the Karabuk University. Project Number: KBÜBAP-17-BM-355.

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tanesi geçerli sayılarak analize tabi tutulmuştur. Araştırmada hipotezleri test etmek için t-testi ve Tek Yönlü Varyans Analizi (ANOVA) testlerinden yararlanılmıştır. Çalışmanın sonucunda, çalışanların örgüt sağlığı algısının, cinsiyete, yaşa, öğrenim durumuna, mesleki deneyime ve kademeye göre anlamlı farklılıklar göstermesine karşın, medeni durumuna ve işletmede çalışma süresine göre anlamlı bir farklılık göstermediği tespit edilmiştir.

**Anahtar Kelimeler:** Örgüt Sağlığı, Sağlıklı Örgüt, Sağlıksız Örgüt, Kardemir A.Ş.

## 1. Introduction

The first definition of the concept of organizational health, which has become a focus of interest for both the theorists and practitioners all over the world, especially in the United States in the last 20 years, was made by Miles. According to Miles, organizational health, which refers to sustain life in its environment, to develop continuously and to develop itself, to cope with problems, to have the ability to live and to be able to develop these abilities, is considered as an indispensable element of success in today's business organizations. In particular, the concept of organizational health, which is started to be used by academicians studying in the field of management, human resources management and industrial psychology, is also the subject of the detailed researches (Vural, 2013:1).

The concept of organizational health is based on its apparently self-evident nature, and its challenge lies in the exploration of the relationship between organizational factors and the health of individual employees (Cox and Cox, 1992:100). In order to have a healthy organization, first climate in the organization should be identified. For description and measurement of the social climate of the organizations, considerable scientific efforts have been made in recent decades. The organizational health is one of the famous and useful frameworks (Mohammad et al., 2012:228).

In healthy organizations, employees are committed and conscientious and helpful and they have high morale and performance. Healthy organization is a place where people come with an interest to the work and are proud to work in this location. On the other hand, an organization that has a healthy atmosphere is an organization that: is reliable in exchange of information, has the flexibility and creativity to make the necessary changes based on the obtained information and has unity and commitment to the goals of the organization (Ziapour, 2015:44).

A healthy organization is the one that is able to encounter, recognize and eliminate the obstacles on its way to live on. One of the healthy organization's characteristics is determining what is on the process. In other words, in the long-term scale organizations are healthy when they think about their strategies and reassess the markets where they will complete. Healthy organizations pay less attention to structure but more to the main processes. Everything is carried through instant cooperation with the producer and customers (Ghorbani et al., 2012:695).

The aim of this study is to demonstrate the organizational health status of Kardemir Inc., which operates in iron and steel sector. At the same time, it will be examined whether the organizational health is related to the demographic characteristics of employees or not. Within this context, in the literature part of the research, firstly the definition of organizational health will be made, then other concepts related to organizational health, dimensions of organizational health, indicators of organizational health and differences between healthy and unhealthy organizations will be emphasized. Finally, what needs to be done to increase the

organizational health will be explained. In the application part of the study, organizational health level of Kardemir Inc. will be determined and analyzes will be carried out related to the demographic variables affecting the organizational health, and suggestions will be presented to the researchers and the company management in order to create healthy organization structures.

## 2. Concept of Organizational Health

The concept of organizational health is a different perspective for the analysis of the nature of the workplace. Organizational health is a concept that can be used for organizations where internal and external conflicts are resolved, employees adapt to the environment and the changes, and the correct functioning can be maintained. Healthy organizations come into play when there are fewer employee changes. Employees adapt to the organization's basic objective and functioning. There is a parallelism between organizational health and organizational success (Basaran, 1992).

In today's business world, the establishment of a healthy structure both at the individual level and at the organizational level, is more important than ever, and comes out as a subject that needs to be examined (Polatci and Ardic, 2007:138).

The concept of organizational health was first used by Argyris towards the end of the 1950s. However, this concept was explained and developed by Miles in the 1960s (Uras, 1998:14). In the 1980s Hoy et al. criticized the conceptual framework created by Miles and proposed their conceptual framework. However, Miles's organizational health theory is still regarded as the most accepted and studied theory even today even though it has been exposed to criticism (Akbaba, 1997:10; Uras, 1998:14). According to Miles (1969), "Healthy organizations are structures that can develop continuous survival skill and have the ability to keep up with the developments." Miles (1969) described organizational health as "healthy organization does not just survive in the environment it exists but develops in the long run, copes with problems, and develops its abilities." (cited by Akbaba Altun, 2001).

Throughout history, the concept of "organizational health" has been examined by taking three focal points to the centre. These are: (1) organizational performance oriented, (2) individual health oriented, (3) both organizational performance and individual health oriented approaches (Köseoglu and Karayormuk, 2009:175).

For many years, the concept of organizational health has lagged behind the concepts such as organizational culture, organizational commitment, business ethics. For this reason, the definitions related to organizational health are limited. When the concept of organizational health is considered in all aspects, it can be seen that it covers the concepts mentioned above (Ardic et al., 2008). Basaran (1996:163) also defines organizational health as "it is working of an organization like all organs work regularly without having any conflict or contradiction with each other as it is in a healthy person".

### 2.1. Dimensions of Organizational Health

When the literature on organizational health is examined, it is seen that there are many classifications for organizational health dimensions. In this study, classifications of Miles (1969), Hoy and Feldman (1987) and Akbaba (1997) will be mentioned.

#### 2.1.1. Organizational Health Dimensions Developed by Miles

In his study, Miles (1969) has identified ten dimensions in three different categories regarding healthy organizations. Hoy et al. (1990) explained these dimensions as follows.

1. Goal Focus: The objectives should be clear and reliable in healthy organizations. Members should act in line with these objectives.

2. Communication Adequacy: The flow of information to the organization from internal and external environment and sharing it is important.

3. Optimal Power Equalization: At every level within the organization, the personnel influence each other and they are in a competition with each other by not harming the organization.

4. Resource Utilization: This is not using resources neither less nor more than required; there is a balance in resource usage.

5. Cohesiveness: It refers to the work and organizational commitment of the organization members.

6. Morale: Members of the organization should be happy and satisfied with the organization.

7. Innovativeness: This is the continuation of innovation processes in organizations to prevent routinization.

8. Autonomy: Organizations can act independently against external changes.

9. Adaptation: The organization is able to overcome the adaptation process without any trouble by realizing the change within itself faster than the environment does.

10. Problem Solving Adequacy: It is the ability to reach the best result with the minimum effort while finding a solution to a problem.

The ten dimensions of organizational health are not separate from each other and interact with each other within any organization. In another expression, the dimensions of organizational health are related to each other (Akbaba, 1997:13; Uras, 1998:15).

According to Miles (1969), a healthy organization does not only survive in the environment it is in, but also grows and develops constantly by improving its coping skills. Short-time actions can be effective or ineffective for that day, but an ongoing life can only be achieved growing by means of constant coping strategy. In this case, it is not right to describe every organization that is ineffective in short-term activities as unhealthy and it is not right to describe every organization that is effective in short-term activities as healthy. The indication of the health of an organization is whether its activities are effective in the long term or not (Owens, 2004:28).

### 2.1.2. Organizational Health Dimensions Developed by Hoy and Feldman

Hoy and Feldman (1987:32) examined organizational health in seven dimensions. These seven dimensions are as follows:

1. Institutional Integrity: This is the organization's ensuring an integrity through adaptation to the environment.

2. Principal Influence: This is the power of influence of the organization managers on the decisions of decision organs.

3. Consideration: This is managers' behaving honest, open and respectful towards the personnel.

4. Initiating Structure: This is the behaviors of the organization manager regarding duties and expectations of success.

5. Resource Support: This is providing the resources required for the organization to function in a healthy manner.

6. Morale: This is the result of a friendly and confiding environment among the organization members.

7. Importance of the Work: This is related to approaching work seriously in organizations and maintaining it in line with standards.

#### 2.1.3. Organizational Health Dimensions Developed by Akbaba

Akbaba (1997) examined organizational health in five dimensions. These dimensions are explained as follows:

1. Organizational Leadership: At this dimension manager; should use all possibilities to achieve the goals of the organization, do his work as planned, cooperate with the employees, establish good relations with his subordinates and superiors, and support and encourage employees.

2. Organizational Integrity: Managers must convey their decisions to all affected members in the organization, protect employees against external pressures, volunteer to listen to the employees, and share their authority with employees.

3. Interaction: Employees should be sensitive to management and business-related problems, work with cooperation and enthusiasm. Disagreements among employees are solved by managers.

4. Organizational Identity: Employees behave friendly to each other and know the goals of the organization. They must take responsibility while taking decisions related to work and comply with innovations.

5. Organizational Products: The resources that the organization provides must be used effectively and employees must help each other. Employees must be self-sufficient in terms of checking themselves from time to time while working.

### 2.2. Indicators of Organizational Health

Many factors, whether healthy or unhealthy, directly affect organizational health. Hence, healthy and unhealthy organization indicators are important signs that show whether the organization is healthy or not.

#### 2.2.1. Indicators of a Healthy Organization

The Role of the Leader: The common feature of the researches conducted is the existence of a significant relationship between organizational health and leadership, effectiveness, performance and organizational communication (Hoy and Feldman, 1987:33). According to many models regarding healthy organizations, leaders play an important role in the establishment of healthy organizations and make significant contributions to organizational success (Emhan, 2005:69-70).

Effective Communication: Another key criterion of healthy organizations is the existence of an effective communication system. An effective communication system plays an important role in achieving business objectives and establishing business relations between employees and managers in a company (Asikoglu, 1986:45). In healthy organizations, there is not only effective communication between individuals or between employees and managers; at the same time, when the system approach is taken into consideration, it is observed that intra-business communication, that is, inter-departmental communication is also effective (Emhan, 2005:65-68).

Efficient Use of Human Resources: Healthy organizations maximize their contributions to the organization by encouraging their employees, giving them new responsibilities, providing training and development. This new motivated, human-driven impulse makes it easier for the organization to fulfill its goals. They contribute to organizational success by taking risk for organizational success while determining the existence of problems and finding the most effective solutions (Bruhn and Chesney, 1994:26).

Employee Participation in Decisions: Employee's participation in decisions, which is one of the key indicators of healthy organizations, ensures that organizational decisions are made more effective because it enables employees to contribute to solving problems. Employees, when they participate in management and decisions, are more committed to their jobs as important and responsible employees, because they recognize themselves as a shareholder, thereby their efficiency at work increases. They increase organizational success by developing themselves and their work and finding alternative solutions to problems (Unlu, 2011:28).

Organizational Learning: Healthy and effective organizations view learning as an indispensable process to maintain their own existence. For this reason, in order to adapt themselves every kind of innovation (change) that may arise in the internal and external environment, they direct the organization's resources to that direction. These organizations constantly keep up with their systems and technologies by increasing their performance via learning at all times. Healthy organizations aim to contribute to organizational learning by constantly creating opportunities for their employees to improve their knowledge and skills. Since such organizations are approaching learning-oriented towards their employees, they are dealing with the improvement of people and the development of capital together (Emhan, 2005:55-57).

Organizational Change: Organizations are systems that are set up to achieve specific goals. For this reason, it is impossible for them to remain insensitive to the changes that take place. Adapting to new situations enables organizations to accelerate their development, and it is also possible by following environmental changes while keeping their strengths high. Therefore, organizational change is an inevitable necessity (Guclu and Sehitoglu, 2006:17). In healthy organizations, employees acknowledge the existence of organizational change and act in concert with this change process. Adaptation to change has become an indispensable condition for enterprises to sustain their existence (Bennis et al., 1976:188). Healthy organizations can improve the ability to adapt to new situations that may arise by providing as much autonomy and freedom as possible for their employees against unexpected and unpredictable difficult situations (Emhan, 2005:47).

Social Responsibility: Contemporary enterprises are organizations that not only produce and market goods but also establish healthy and harmonious relationships with their environment as stated in the characteristics of healthy organizations. With

this characteristic, organizations bear some responsibilities for the society. They initiate projects for the benefit of the community and contribute to the formation of a healthy society by dealing with the problems of the environment they exist in. Thus, businesses can remain healthy as well as maintain their existence in a healthy society (Newell, 1995:7).

Morale: The morale factor plays an extremely important role in terms of health of the intra-organizational relationships. Therefore, in order to organize human relations positively in the organizations, in other words, to make the public relations works successful, organizational morale should be kept high (Goksel, 1990: 81-83).

### 2.2.2. Indicators of an Unhealthy Organization

Excessive Stress in Employees: First sign of unhealthy organizations is the presence of excessive stress in employees. Stress is a feeling that leads to inefficiencies in organizations, absence of organization members due to diseases, low quality in general, increase in anxieties and increase in costs regarding measures to be taken against health problems (Gul, 2007:321). Nowadays, the change is very fast and the people working in an intense competitive environment are under great stress. This extreme stress situation negatively affects employee health as well as endangers the health of organizations (Emhan, 2005:72-75).

Conflict: Conflict can arise due to various differences during the operation of the organization (differences in objectives, differences in defining problems, differences in value judgments, etc.) (Kocel, 1995:408). Conflict is usually a sign of impending dangers. However, some forms of conflict can create new opportunities. Therefore, which one will emerge depends on the perception, correct understanding and proper management of the conflict (Mirzeoglu, 2005:52).

Absenteeism: Increased rates of absenteeism can be observed because of the dissatisfaction of employees who are not happy with their work. Efficiency losses can be observed in organizations where such employees work intensively. For this reason, dissatisfaction is a subject which should be emphasized (Rue and Bayars, 1995:363).

Employee Turnover and High Employee Turnover Rate: Employee turnover means that employees quit an organization or are dismissed from the employment. High employee turnover rates can create many problems hard to solve for the organizations. Therefore, if the turnover rate of an organization is high, the communication between the units should be increased and the researchers should be carried out regarding the reasons why the members of the organization quit their work (Sabuncuoglu, 2000:40-42).

## 2.3. Previous Studies on Organizational Health and Hypotheses

When the studies conducted on organizational health in Turkey are examined, it is seen that the vast majority of them were carried out in educational institutions. In other organizations other than educational establishments, there is almost no research to measure the organizational health perception directly. Below are some examples of studies aimed at measuring organizational health perception.

In the research conducted by Polatci et al. (2008), it was aimed to measure the level of organizational health in vocational schools of a state university and to reveal the relationship between organizational health and demographic variables. As a result of the research, organizational health was high in some dimensions and low in some dimensions. In addition, it was found out that variables such as gender, type of

employee title, duration of work did not affect the organizational health perception, but when compared according to the unit variable the personnel worked in the university, there were differences in their organizational health perceptions.

In the research conducted by Coban (2007), it was tried to determine what organizational health perception level of managers and teachers working in primary schools were. As a result of the research, it was determined that the opinions reported by the participants about the organizational health were positive. It was also found out that this perception differed for all dimensions in terms of variables such as task type, school type, and there were significant differences in some dimensions in terms of gender variable.

Doğan and Bozkurt (2008) conducted a study to reveal the current state of organizational health through the perceptions of five-star hotels' managers and employees in Istanbul. They also examined whether organizational health dimensions differ according to the demographic variables of employees. According to the results of the research, the organizational health and its dimensions differed according to each hotel. Moreover, according to the education status of the employees, the departments and positions they work, the organizational health perception showed difference.

The aim of this study is to determine the degree of organizational health perception of the employees working in Kardemir Inc. and investigate whether the perception of organizational health differs according to demographic variables. For this purpose, the generated hypotheses are as follows.

*H1: The organizational health perception of employees (H1a: organizational leadership, H1b: organizational integrity, H1c: organizational identity, H1d:interaction, H1e: organizational products) differs according to gender.*

*H2: The organizational health perception of employees (H2a: organizational leadership, H2b: organizational integrity, H2c: organizational identity, H2d:interaction, H2e: organizational products) differs according to age.*

*H3: The organizational health perception of employees (H3a: organizational leadership, H3b: organizational integrity, H3c: organizational identity, H3d:interaction, H3e: organizational products) differs according to marital status.*

*H4: The organizational health perception of employees (H4a: organizational leadership, H4b: organizational integrity, H4c: organizational identity, H4d:interaction, H4e: organizational products) differs according to education level.*

*H5: The organizational health perception of employees (H5a: organizational leadership, H5b: organizational integrity, H5c: organizational identity, H5d:interaction, H5e: organizational products) differs according to tenure.*

*H6: The organizational health perception of employees (H6a: organizational leadership, H6b: organizational integrity, H6c: organizational identity, H6d:interaction, H6e: organizational products) differs according to seniority.*

## 3. Research Method

The subject and purpose of the research, population and sample, data collection method, measurement tool and analysis method are given in this section.

### 3.1. Subject and Purpose of Research

The aim of the study is to determine the degree of organizational health perception of employees who work at different units in Kardemir Inc. and investigate whether organizational health perception of employees differs according to the demographic variables. In this framework, it is aimed to determine the differences in perception of the five dimensions of organizational health (organizational leadership, organizational integrity, organizational identity, interaction and organizational products) according to gender, age, marital status, education level, tenure and seniority.

Organizations need to innovate, adapt, and constantly evolve to make their existence sustainable. But in addition to this, one condition of existence is to be healthy. Healthy organizations can reach their goals more easily and can adapt to both internal and external conditions more easily. Therefore, it is thought that this research which investigate the degree of organizational health perceptions of employees will be beneficial to all managers, primarily the Kardemir Inc. However, it is aimed to contribute to the literature on organization health.

### 3.2. Population and Sample of Research

The population of the research consist of workers, officers and managers who are working in Karabuk Iron Steel Industry Trade and Company Inc. (Kardemir Inc). According to information received from Kardemir Inc.'s human resources department, the number of employees of the company is determined to be 3899. Therefore, the population of work consists of 3899 people.

It has been determined that the minimum sample size is 350 persons, calculated by taking into account a margin of error of 5% within the limits of 95% reliability (Sekaran, 2013:294). Within this scope, 500 questionnaires were distributed within the population by random sampling method considering the return rates. 473 of the distributed surveys have returned. 23 of the returned questionnaires were found to be invalid and excluded from the analysis. As a result, the analyzes were conducted on 450 employees to test the research hypotheses.

### 3.3. Data Collection Method and Measurement Tools

In the study, data were obtained through the survey method. A face-to-face survey technique was used to collect the data. The questionnaire consists of two parts. In the first part, there are some questions about determining the demographic characteristics of the employees participating in the survey. The second part consists of expressions to determine the degree of organizational health perception.

The Organizational Health Scale developed by Akbaba (1997) was used to determine employees' perceptions of organizational health. The scale consists of 45 expressions and 5 dimensions. 12 expressions are used to determine the degree of organizational leadership, 8 expressions are used to determine the degree of organizational integrity, 6 expressions are used to determine the degree of organizational identity, 12 expressions are used to determine the degree of interaction and 7 expressions are used to determine the degree of organizational products.

### 3.4. Analysis Method

First of all, in the research, the validity and reliability of the Organizational Health Scale were tested. Confirmatory factor analysis was used in the validity analysis. In the reliability analysis, Cronbach's alpha (α) statistic was calculated for the

scale and for each dimension. Whether employees' perceptions of organizational health differ according to demographic variables was investigated through t-test and ANOVA analysis.

## 4. Findings

In the context of the findings, firstly the demographic characteristics of the participants are examined and then the validity and reliability analysis, the descriptive statistics and the results of the hypothesis tests are mentioned.

### 4.1. Demographic Characteristics

The demographic distribution of the sample is presented in Table 1.

**Table 1:** Demographic Distribution

| Variable | Group | N | % |
|---|---|---|---|
| Gender | Female | 32 | 7,1 |
| | Male | 418 | 92,9 |
| Age | 30 years or under | 61 | 13,6 |
| | 31-40 years | 190 | 42,2 |
| | 41 years or higher | 199 | 44,2 |
| Marital Status | Married | 384 | 85,3 |
| | Single | 66 | 14,7 |
| Education Level | High School or lower | 284 | 63.1 |
| | Associate Degree | 71 | 15.8 |
| | Graduate or Postgraduate Degree | 95 | 21.1 |
| Tenure | 5 years or less | 72 | 16.0 |
| | 6-15 years | 177 | 39.3 |
| | 16-25 years | 166 | 36.9 |
| | 26 years or more | 35 | 7.8 |
| Seniority | Employee (Worker or Civil Servant) | 345 | 76.7 |
| | Lower Level Manager | 52 | 11.6 |
| | Mid-level and Senior Manager | 53 | 11.7 |
| **TOTAL** | | **450** | **100** |

According to Table 1, it was determined that 92.9% of the participants were male and 7.1% were female, 85.3% of participants were married while 14,7% were single. When the age distribution was examined, it is seen that 13.6% of the participants were 30 years or under, 42.2% were between the ages of 31-40 and 44.2% were 41 years or higher.

When the educational level of the participants is examined, it is determined that 63.1% of them have high school and lower education, 15.8% have associate degree and 21.1% have graduate or postgraduate degree.

According to tenure, the proportion of employees who worked 5 years or less was 16%, the proportion of employees who worked between 6-15 years 39.3%, the proportion of employees who worked between 16-25 years 36.9% and the proportion of employees who worked 25 years or more was 7.8%.

Finally, when the seniority of the participants were examined, it was seen that 76.7% were employees (workers or civil servants), 11.6% were lower-level managers and 11.7% were mid-level and senior managers.

### 4.2. Validity and Reliability Analysis

The scale used in the research was developed by Akbaba (1997) and was used in different researches (Çoban, 2007; Ordu and Tanrıöğen, 2013). For this reason, the scale is tested with confirmatory factor analysis in terms of research sample.

In the context of confirmatory factor analysis, model fit was examined by chi square test ($\chi 2/sd$), goodness of fit index (GFI), normed fit index (NFI), Tucker-Lewis index (TLI), comparative fit index (CFI) and root mean square error of approximation (RMSEA). A $\chi 2/sd$ value below 5, a GFI value over 0.85, a NFI, TLI and CFI value over 0,90 and a RMSEA value below 0.08 means acceptable adaptability (Schumacker and Lomax, 2004:81-84; Byrne, 2010:73-84; Kline, 2011:193-209; Meydan and Şeşen, 2011:31-37).

As a result of the analysis, it was observed that two expressions in the organizational integrity dimension, four expressions in the interaction dimension and one expression in the organizational products dimension had a factor load of less than 0.50. This means, seven expressions negatively affect the statistics of factor structure and goodness of fit. Therefore, those items with low factor load were excluded from the analysis and the confirmatory factor analysis was repeated (Hair vd., 1998:625; Brown, 2006:118; Byrne, 2010:85).

With repeated confirmatory factor analysis, it was determined that factor loadings for organizational leadership dimension varied between 0.511 and 0.808, for organizational integrity dimension varied between 0.583 and 0.840, for interaction dimension varied between 0.541 and 0.712, for organizational identity dimension varied between 0.551 and 0.791, for organizational products dimension varied between 0.581 and 0.706.

When the values of goodness of fit were examined, $\chi 2/sd$ was found to be 2.327, GFI was found to be 0.855, NFI was found to be 0.864, TLI was found to be 0.901, CFI was found to be 0.911 and RMSEA was found to be 0.054. According to these findings, construct validity of scale was provided. These results show that the five-factor structure of the scale used in the study is confirmed.

Following the validity analysis, the reliability of the scale was calculated with Cronbach's alpha ($\alpha$) statistic. The Cronbach's alpha values are shown in Table 2.

**Table 2:** Reliability Values for Organizational Health Scale

| Scale / Dimension | Number of Items | Cronbach's Alpha Values |
|---|---|---|
| Organizational Leadership | 12 | 0.926 |
| Organizational Integrity | 6 | 0.860 |
| Organizational Identity | 6 | 0.836 |
| Interaction | 8 | 0.836 |
| Organizational Products | 6 | 0.822 |
| **Organizational Health** | **38** | **0.960** |

When Table 2 is examined, it is determined that the reliability values obtained for the organizational health scale and its sub-dimensions are over 0.70. Therefore, the validity of the organization health scale has been validated (Nunnally and Bernstein, 1994: 265).

### 4.3. Descriptive Statistics

Within the descriptive statistics, the mean, standard deviation and correlation values of the organizational leadership, organizational integrity, organizational identity,

interaction and organizational products sub-dimensions of organizational health are included. Descriptive values are presented in Table 3.

**Table 3:** Means, Standard Deviations and Correlations

| Variable | Mean | S. D. | Correlations | | | | |
|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 |
| 1.Organizational Leadership | 3.431 | 0.755 | - | | | | |
| 2. Organizational Integrity | 3.297 | 0.782 | 0.809** | - | | | |
| 3. Organizational Identity | 3.454 | 0.691 | 0.722** | 0.721** | - | | |
| 4. Interaction | 3.453 | 0.750 | 0.552** | 0.565** | 0.718** | - | |
| 5. Organizational Products | 3.421 | 0.710 | 0.644** | 0.672** | 0.766** | 0.746** | - |

N=450, *p < 0.05, **p<0.01

According to Table 3, the mean of organizational integrity is lower than the mean of other dimensions of organizational health. Although not much higher than other dimensions, interaction and organizational identity dimensions have the highest mean. Moreover, it is seen that correlations among all variables used in the study are meaningful (p<0,01).

## 4.4. Hypothesis Testing

Within the scope of hypothesis testing, it was researched whether the dimensions of organizational health differ according to the demographic variables. The first hypothesis of the study investigates whether the perception of organizational leadership, organizational integrity, organizational identity, interaction, and organizational products dimensions differ among females and males. The results obtained by the t-test are presented in Table 4.

**Table 4:** Organizational Health Perception by Gender

| Variable | Category | Mean | S. D. | t-value | Sig. (p) |
|---|---|---|---|---|---|
| Organizational Leadership | Female | 3.679 | 0.681 | **2.122** | **0.041*** |
| | Male | 3.412 | 0.758 | | |
| Organizational Integrity | Female | 3.411 | 0.661 | 0.858 | 0.391 |
| | Male | 3.288 | 0.791 | | |
| Organizational Identity | Female | 3.411 | 0.831 | -0.298 | 0.768 |
| | Male | 3.456 | 0.745 | | |
| Interaction | Female | 3.375 | 0.587 | -0.783 | 0.439 |
| | Male | 3.460 | 0.699 | | |
| Organizational Products | Female | 3.369 | 0.611 | -0.489 | 0.627 |
| | Male | 3.425 | 0.718 | | |
| **ORGANIZATIONAL HEALTH** | Female | 3.481 | 0.575 | 0.657 | 0.515 |
| | Male | 3.411 | 0.649 | | |

*p < 0.05, **p<0.01, N= female 32, male 418, df= 448

When Table 4 is examined, there is no significant difference in the perceptions of employees' organizational integrity, organizational identity, interaction and organizational products by gender. On the other hand, the degree of organizational leadership differs in terms of female and male employees (t(448)=2.122, p<0.05). In other words, the perceptions of organizational leadership of female employees (Mean=3.679) are higher than those of male employees (Mean=3.412). Another finding is that the perception of organizational health does not differ between female and male employees. According to these findings, H1b, H1c, H1d and H1e hypotheses are rejected and H1a hypothesis is accepted.

The second hypothesis of the study investigates whether the perception of organizational leadership, organizational integrity, organizational identity, interaction, and organizational products dimensions differ among age. The results obtained by the ANOVA analysis are presented in Table 5.

**Table 5:** Organizational Health Perception by Age

| Variable | Category | Mean | S. D. | F | Sig. (p) | Post Hoc. (LSD) |
|---|---|---|---|---|---|---|
| Organizational Leadership | 30 years or under[1] | 3.441 | 0.614 | 0.010 | 0.990 | |
| | 31-40 years[2] | 3.432 | 0.718 | | | |
| | 41 years or higher[3] | 3.426 | 0.829 | | | |
| Organizational Integrity | 30 years or under[1] | 3.161 | 0.758 | 1.083 | 0.340 | |
| | 31-40 years[2] | 3.326 | 0.751 | | | |
| | 41 years or higher[3] | 3.310 | 0.817 | | | |
| Organizational Identity | 30 years or under[1] | 3.213 | 0.755 | **4.215** | **0.015*** | **1-2 p=0.029*** |
| | 31-40 years[2] | 3.452 | 0.756 | | | **1-3 p=0.004**** |
| | 41 years or higher[3] | 3.531 | 0.730 | | | |
| Interaction | 30 years or under[1] | 3.319 | 0.555 | 1.515 | 0.221 | |
| | 31-40 years[2] | 3.496 | 0.682 | | | |
| | 41 years or higher[3] | 3.455 | 0.734 | | | |
| Organizational Products | 30 years or under[1] | .,333 | 0.613 | 0.569 | 0.567 | |
| | 31-40 years[2] | 3.443 | 0.723 | | | |
| | 41 years or higher[3] | 3.427 | 0.726 | | | |
| **ORGANIZATIONAL HEALTH** | 30 years or under[1] | 3.318 | 0.530 | 0.919 | 0.399 | |
| | 31-40 years[2] | 3.446 | 0.613 | | | |
| | 41 years or higher[3] | 3.418 | 0.701 | | | |

*p < 0.05, **p<0.01, N= 30 years or under 61, 31-40 years 190, 41 years or higher 199, df= 449

When Table 5 is examined, no statistically significant difference was found in the perceptions of employees' organizational leadership, organizational integrity, interaction and organizational products dimensions. In addition, there is no difference in general organizational health perception by age. However, there are differences according to age in the dimension of organizational identity. In this context, perceptions of organizational identity among employees aged 30 years or under are lower than those aged between 31-40 and 41 years or higher. This means, it has been determined that the perception of organizational identity increases with age. According to these findings, H2a, H2b, H2d and H2e hypotheses are rejected and H2c hypothesis is accepted.

The third hypothesis of the study investigates whether the perception of organizational leadership, organizational integrity, organizational identity, interaction, and organizational products dimensions differ among married and single employees. The results obtained by the t-test are presented in Table 6.

**Table 6:** Organizational Health Perception by Marital Status

| Variable | Category | Mean | S. D. | t-value | Sig. (p) |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| Organizational Leadership | Married | 3.430 | 0.761 | -0.023 | 0.982 |
| | Single | 3.433 | 0.724 | | |
| Organizational İntegrity | Married | 3.299 | 0.788 | 0.136 | 0.892 |
| | Single | 3.285 | 0.750 | | |
| Organizational Identity | Married | 3.440 | 0.753 | -0.885 | 0.379 |
| | Single | 3.527 | 0.737 | | |
| Interaction | Married | 3.454 | 0.700 | -0.027 | 0.979 |
| | Single | 3.456 | 0.647 | | |
| Organizational Products | Married | 3.425 | 0.712 | 0.311 | 0.756 |
| | Single | 3.396 | 0.706 | | |
| **ORGANIZATIONAL HEALTH** | Married | 3.415 | 0.651 | -0.101 | 0.920 |
| | Single | 3.423 | 0.602 | | |

*p < 0.05, **p<0.01, N= married 384, single 66, df= 448

When Table 6 is examined, no statistically significant difference was found in any dimension of organizational health perception and general organizational health perception according to marital status. Therefore, H3a, H3b, H3c, H3d and H3e hypotheses are rejected.

With the fourth hypothesis of the study, it is investigated whether the perception of organizational leadership, organizational integrity, organizational identity, interaction, and organizational products dimensions differ among education level. The results obtained by the ANOVA analysis are presented in Table 7.

**Table 7:** Organizational Health Perception by Education Level

| **Variable** | **Category** | **Mean** | **S. D.** | **F** | **Sig. (p)** | **Post Hoc. (LSD)** |
|---|---|---|---|---|---|---|
| Organizational Leadership | High School or lower[1] | 3.411 | 0.783 | 0.501 | 0.606 | |
| | Associate Degree[2] | 3.417 | 0.688 | | | |
| | Graduate or Postgraduate[3] | 3.500 | 0.719 | | | |
| Organizational Integrity | High School or lower[1] | 3.322 | 0.789 | 0.593 | 0.553 | |
| | Associate Degree[2] | 3.298 | 0.768 | | | |
| | Graduate or Postgraduate[3] | 3.221 | 0.773 | | | |
| Organizational Identity | High School or lower[1] | 3.519 | 0.745 | **6.176** | **0.002**** | **1-3 p=0.025*** |
| | Associate Degree[2] | 3.507 | 0.784 | | | |
| | Graduate or Postgraduate[3] | 3.215 | 0.697 | | | |
| Interaction | High School or lower[1] | 3.494 | 0.720 | 2.626 | 0.073 | |
| | Associate Degree[2] | 3.487 | 0.668 | | | |
| | Graduate or Postgraduate[3] | 3.310 | 0.604 | | | |
| Organizational Products | High School or lower[1] | 3.542 | 0.726 | **8.241** | **0.001**** | **1-3 p=0.001**** |
| | Associate Degree[2] | 3.476 | 0.674 | | | **2-3 p=0.025*** |
| | Graduate or Postgraduate[3] | 3.166 | 0.631 | | | |
| **ORGANIZATIONAL HEALTH** | High School or lower[1] | 3.442 | 0.671 | 1.407 | 0.246 | |
| | Associate Degree[2] | 3.447 | 0.571 | | | |
| | Graduate or Postgraduate[3] | 3.318 | 0.605 | | | |

*p < 0.05, **p<0.01, N= High School or lower 284, Associate Degree 71, Graduate or Postgraduate Degree 95, df= 449

According to Table 7, no statistically significant difference was found in the perceptions of organizational leadership, organizational integrity and interaction dimensions according to education level. Likewise, there is no significant difference in organizational health perceptions according to the educational level. On the other hand, differences in organizational identity and organizational product dimensions have been determined according to the educational level of the employees. The perception of organizational identity differs in terms of high school or lower degree employees and graduate or postgraduate degree employees. Also, it has been identified that perception of organizational products differs among employees who has high school or lower,

associate and graduate or postgraduate degree. According to these findings, hypotheses H4a, H4b and H4d are rejected, hypotheses H4c and H4e are accepted.

With the fifth hypothesis of the study, it is investigated whether the perception of organizational leadership, organizational integrity, organizational identity, interaction, and organizational products dimensions differ among tenure. The results obtained by the ANOVA analysis are presented in Table 8.

**Table 8:** Organizational Health Perception by Tenure

| **Variable** | **Category** | **Mean** | **S. D.** | **F** | **Sig. (p)** | **Post Hoc. (LSD)** |
|---|---|---|---|---|---|---|
| Organizational Leadership | 5 years or less[1] | 3.473 | 0.753 | 0.226 | 0.878 | |
| | 6-15 years[2] | 3.428 | 0.678 | | | |
| | 16-25 years[3] | 3.433 | 0.834 | | | |
| | 26 years or more[4] | 3.345 | 0.767 | | | |
| Organizational Integrity | 5 years or less[1] | 3.243 | 0.771 | 0.173 | 0.915 | |
| | 6-15 years[2] | 3.315 | 0.753 | | | |
| | 16-25 years[3] | 3.307 | 0.824 | | | |
| | 26 years or more[4] | 3.266 | 0.770 | | | |
| Organizational Identity | 5 years or less[1] | 3.280 | 0.804 | 1.976 | 0.117 | |
| | 6-15 years[2] | 3.497 | 0.716 | | | |
| | 16-25 years[3] | 3.504 | 0.757 | | | |
| | 26 years or more[4] | 3.347 | 0.736 | | | |
| Interaction | 5 years or less[1] | 3.322 | 0.635 | 1.177 | 0.318 | |
| | 6-15 years[2] | 3.483 | 0.684 | | | |
| | 16-25 years[3] | 3.490 | 0.733 | | | |
| | 26 years or more[4] | 3.407 | 0.628 | | | |
| Organizational Products | 5 years or less[1] | 3.294 | 0.683 | 1.031 | 0.379 | |
| | 6-15 years[2] | 3.448 | 0.730 | | | |
| | 16-25 years[3] | 3.456 | 0.710 | | | |
| | 26 years or more[4] | 3.381 | 0.664 | | | |
| **ORGANIZATIONAL HEALTH** | 5 years or less[1] | 3.346 | 0.602 | 0.531 | 0.661 | |
| | 6-15 years[2] | 3.436 | 0.615 | | | |
| | 16-25 years[3] | 3.440 | 0.698 | | | |
| | 26 years or more[4] | 3.351 | 0.607 | | | |

*p < 0,05, **p<0,01, N=5 years or less 72, 6-15 years 177, 16-25 years 166, 26 years or more 35 df=449

When Table 8 is examined, no statistically significant difference was found in any dimension of organizational health perception and overall organizational health perception according to tenure. Therefore, H6a, H6b, H6c, H6d and H6e hypotheses are rejected.

With the sixth and final hypothesis of the study, it is investigated whether the perception of organizational leadership, organizational integrity, organizational identity, interaction, and organizational products dimensions differ among seniority. The results obtained by the ANOVA analysis are presented in Table 9.

**Table 9:** Organizational Health Perception by Seniority

| Variable | Category | Mean | S. D. | F | Sig. (p) | Post Hoc. (LSD) |
|---|---|---|---|---|---|---|
| Organizational Leadership | Worker or Civil Servant[1] | 3.400 | 0.779 | 1.228 | 0.294 | |
| | Lower Level Manager[2] | 3.543 | 0.697 | | | |
| | Mid-level and Senior Man.[3] | 3.520 | 0.638 | | | |
| Organizational Integrity | Worker or Civil Servant[1] | 3.288 | 0.796 | 0.384 | 0.681 | |
| | Lower Level Manager[2] | 3.384 | 0.742 | | | |
| | Mid-level and Senior Man.[3] | 3.267 | 0.736 | | | |
| Organizational Identity | Worker or Civil Servant[1] | 3.515 | 0.753 | **5.134**** | **0.006** | **1-2 p=0,031*** |
| | Lower Level Manager[2] | 3.275 | 0.751 | | | **1-3 p=0,009**** |
| | Mid-level and Senior Man.[3] | 3.226 | 0.670 | | | |
| Interaction | Worker or Civil Servant[1] | 3.483 | 0.707 | 1.385 | 0.251 | |
| | Lower Level Manager[2] | 3.382 | 0.649 | | | |
| | Mid-level and Senior Man.[3] | 3.334 | 0.617 | | | |
| Organizational Products | Worker or Civil Servant[1] | 3.475 | 0.711 | **4.836**** | **0.008** | **1-3 p=0,005**** |
| | Lower Level Manager[2] | 3.307 | 0.705 | | | |
| | Mid-level and Senior Man.[3] | 3.179 | 0.654 | | | |
| **ORGANIZATIONAL HEALTH** | Worker or Civil Servant[1] | 3.430 | 0.654 | 0.450 | 0.638 | |
| | Lower Level Manager[2] | 3.404 | 0.639 | | | |
| | Mid-level and Senior Man.[3] | 3.341 | 0.580 | | | |

*p < 0,05, **p<0,01, N= worker or civil servant 345, lower level manager 52, mid-level and senior manager 53, df= 449

When Table 9 is examined, no statistically significant difference was detected in the perceptions of employees' organizational leadership, organizational integrity and interaction dimensions. Likewise, no statistically significant difference was found in overall organizational health perception according to seniority. On the other hand, differences in organizational identity and organizational product dimensions have been determined according to seniority. Findings show that perception of the organizational identity of workers or civil servants were higher than those of lower level, mid-level and senior managers. Findings also show that perception of the organizational products of workers or civil servants were higher than those of mid-level managers and senior managers. According to these findings, H7a, H7b and H7d hypotheses are rejected and H7c and H7e hypotheses are accepted.

## Conclusion

Organizations need to create processes that are innovative, healthy and constantly renew themselves in order to sustain their lives. Organizations with these

characteristics can reach their goals more easily and extend their market share by gaining an advantage over their competitors.

It was found out that there was no statistically significant difference in employees' perceptions regarding organizational integrity, organizational identity, environmental interaction and organizational product dimensions in terms of gender. On the other hand, it was seen that the level of perception regarding organizational leadership dimension was higher in female employees. Moreover, it was seen that the perception of organizational health did not show any difference in terms of male and female employees.

It was determined that there was no statistically significant difference in the perceptions of employees regarding organizational leadership, organizational integrity, environmental interaction and organizational product dimensions in terms of age. However, there were differences in organizational identity dimension in terms of age. Organizational identity perceptions of employees aged 30 and below were lower than workers aged 31-40 and above. The perception of organizational identity increases with age.

It was found out that there was no statistically significant difference in any dimension of the employees' organizational health perceptions in terms of marital status.

It was determined that there was no significant difference in the perceptions of employees regarding organizational leadership, organizational integrity and environmental interaction dimensions according to the educational background. Again, it was found out that there was no difference in organizational health perception in general according to educational background. On the other hand, it was determined that there were differences in organizational identity and organizational product dimensions according to the educational background of the employees. Within the frame of the findings, employees with high school or lower school degrees had higher perception of organizational identity than those with bachelor's and master's degrees. In addition to this, organizational product perceptions of employees with bachelor's and master's degrees are lower than those with both vocational school degree and high school or lower school degrees.

No statistically significant difference was found in the perceptions of employees regarding organizational leadership and organizational integrity dimensions according to professional experience. On the contrary, it was determined that there were differences in other dimensions of organizational health and organizational health perception in general according to professional experience. According to the findings, organizational identity perceptions of the employees with 5 years or less experience were lower than employees with 6-15 years of experience and 26 years or more of experience. Again, environmental interaction, organizational product and general organizational health perceptions of employees with 5 years or less of experience were lower than those with 6-15 years of experience.

No statistically significant difference was found in any dimension of the organizational health perception of the employees and in the organizational health perception in general according to the term of employment in the enterprise.

It was determined that there was no statistically significant difference in the perceptions of employees regarding organizational leadership, organizational integrity and environmental interaction dimensions in terms of the position employees work in.

Again, it was found out that there was no difference in terms of organizational health in general according to the position employees work in. In contrast to this, it was determined that there were differences in organizational identity and organizational product dimensions according to the position employees work in. According to the findings, personnel's perception of organizational identity was higher than low, middle and upper level managers'.

The results obtained from the research show that organizational health is perceived above the average by the organization's employees who are selected as the sample. This is accepted as an indicator that this organization is a healthy organization. The organizational health perceptions of the employees were different according to various variables, but it is seen that this situation did not affect the average much in general.

Raising the level of organizational health and making it sustainable should be a priority issue for every organization. Major policies and strategies that organizations can follow to make organizational health sustainable are: being more open to innovation and development, increasing organizational commitment, directing employees to behave proactively, controlling stress in the workplace, creating a peaceful, motivating and satisfying work environment by giving importance to the personnel, strengthening communication and team spirit, giving maximum importance to worker's health and safety, and creating an open and shared organizational culture.

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