

**THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE  
DIMENSIONS AND LEADERSHIP PRACTICES:  
A STUDY ON WHITE-COLLAR EMPLOYEES IN DEFENSE INDUSTRY<sup>1</sup>**

**DUYGUSAL ZEKÂ BOYUTLARI İLE LİDERLİK UYGULAMALARI  
ARASINDAKİ İLİŞKİ: SAVUNMA SANAYİ SEKTÖRÜNDE BEYAZ  
YAKA ÇALIŞANLAR ÜZERİNE BİR ARAŞTIRMA**

**Kutay ÖZDEMİR<sup>2</sup>  
Yrd. Doç. Dr. Ahmet Sait ÖZKUL<sup>3</sup>**

**ABSTRACT**

*The purpose of this study is to investigate the relationship between emotional intelligence and leadership practices of the white-collar employees in defense industry. In this context, as a result of literature research, emotional intelligence with the scale of 16 questions and leadership practices with the scale of 30 questions are used. Population of the research is comprised of company which operates in defense industry in Ankara. The company refuses to disclose its name in this study due to their privacy policy. 207 white-collar employees from this company are chosen as a sample to represent population and 183 of them took part in this study. The data gathered through the research is analyzed via Stata 13,0 and IBM SPSS (Statistical Package for Social Sciences) 22.0. As a result of this study, the relationship between emotional intelligence dimensions and leadership practices is found to be positive and significant.*

**Keywords:** Defense Industry, Leadership, Leadership Practices, Emotional Intelligence

**Jel Codes:** M10, M12

**ÖZET**

*Araştırmanın amacı, savunma sanayi sektöründe beyaz yaka çalışanların duygusal zeka boyutları ile liderlik uygulamaları arasındaki ilişkiyi incelemektir. Bu amaçla, literatür taraması sonucunda 16 soruluk duygusal zeka ölçeği ve 30 soruluk liderlik uygulamaları ölçeği kullanılmıştır. Araştırmanın evrenini, Ankara ilinde savunma sanayi sektöründe faaliyet gösteren fakat gizlilik politikaları nedeniyle isminin kullanılmasına izin vermeyen bir firma oluşturmaktadır. Araştırmada örneklem olarak firma içerisindeki 207 beyaz yaka çalışan seçilmiştir. Seçilen örneklem içerisinde 183 kişi çalışmaya katılmıştır. Elde edilen veriler, Stata 13.0 ve IBM SPSS (Statistical Package for Social Sciences) 22.0 programları yardımıyla analiz edilmiştir. Araştırma sonucunda, duygusal zekâ boyutları ile liderlik uygulamaları arasında pozitif yönlü ve anlamlı bir ilişki olduğu ortaya konmuştur.*

**Anahtar Kelimeler:** Savunma Sanayi, Liderlik, Liderlik Uygulamaları, Duygusal Zekâ

**Jel Kodları:** M10, M12

<sup>1</sup> This study is compiled from the first author's unpublished master thesis titled "An Analysis of the Relationship Between Leadership Practices and Emotional Intelligence Dimensions".

<sup>2</sup> Süleyman Demirel University, Institute of Social Sciences, Sub-Department of Business Administration, Ph.D. Student, kutayzdmr@hotmail.com

<sup>3</sup> Süleyman Demirel University, Faculty of Communication, Department of Public Relations and Publicity, Asst. Prof., saitozkul@sdu.edu.tr

## 1. INTRODUCTION

Humans started to live together with the other humans as groups who share same goals, values, and opinions when they figured out that they are not able to compete with environmental struggles alone. Individuals need a decision maker to guide them to live in order. These processes have introduced the concept of leader and leadership.

Individuals in the group share same goal such as becoming superior than other groups, improve their life standards and developing. To achieve such goals groups need to be encouraged and set into action. Providing that is a hard and time consuming process. An individual who starts, manages and finalizes this process is called leader.

In today's world, organizations are shaped around the individuals' expectations, emotions and opinions. For this reason, leader's duties and responsibilities have been altered in time. Leaders should understand employees' emotions, develop empathy, motivate and avoid conflicts between employees. All of which can be ensured by emotional intelligence. Emotional intelligence is the ability to understand and interpret emotions and ideas of people in the same environment along with individual's own emotions and ideas. In the past, intelligence in other words IQ has been accepted as an essential factor to communicate and succeed. However, this perception is changed due to the fact that the people with advanced emotional intelligence are more coherent with themselves and the people around them. This discovery shows the importance of emotional intelligence in leadership practices.

In recent years, a lot of scientific researches are conducted about defense industry in the field of science and technology. In addition, organizational and administrative studies which support these scientific researches are also important in term of management literature.

When literature is examined, the effect of emotional intelligence dimensions on leadership practices are investigated in this research in order to contribute to studies on leadership, management and innovation in defense industry. First of all, the concept of emotional intelligence is addressed and then leadership and leadership practices are explained. Finally, methods and findings about the company which works in the field of defense industry is explained.

## 2. CONCEPT OF EMOTIONAL INTELLIGENCE

In order to understand the concept of emotional intelligence better, intelligence and emotion notions should be defined shortly.

### 2.1. Concept of Emotion

The word emotion originates from the latin word of motion (movere) (Titrek 2007:47). It is defined as the random feeling and sum of thoughts, psychological and physical situations, and a string of actions that are shaped around this random feeling (Goleman, 2016:373). Contrary to common belief, emotions can be positive or negative due to human nature. The source of emotions is individual's mental state and it triggers creativity, ensures self-honesty and helps to establish positive relationships (Cooper and Sawaf, 2003:12).

Mayer and Salovey interpret concept of emotions as interconnected and coordinated responses which are physiological, cognitive, motivation depended and experience based. Expression of the individuals inner world, ability to perceive, cognitive awareness and the

inner actions that drives individual's psychology are also originated from emotions (Mayer et al., 2000:274).

Emotions are the basis of behaviors. Emotions motivate people and help to steer their behaviors. When examined from the organizational point of view, it is important that employees understand and evoke their feelings and direct them in accordance with aims of the organization. Within this context, employees should use their emotional qualifications effectively in their work life (Titrek, 2007:100)

There are many researches about the concept of emotion from past to present and it has always been a challenging topic for researchers. Although experimental researchers lost interest towards emotion concept because it is formed in the inner world of individual and differs, it became popular among psychology researchers (Aslan 2009:7).

## **2.2. Concept of Intelligence**

There are many definitions of the intelligence because the intelligence cannot be determined by a single talent and it shows itself in many different forms (Konrad and Hendl 2003:41).

According to French psychologist Alfred Binet who is the first person to carry out the intelligence test, intelligence is defined as heading for a goal, making effort to achieve that goal, adapting to the environment, criticizing oneself, evaluating accurately, deciding accurately and having a critical perspective (Kulaksızoğlu, 2008:135).

From another perspective, intelligence is defined as the ability of learning easily, ability to solve difficult problems easily and accomplishing the tasks accurately and in a practical way. Moreover, intelligence is a task, an act and a work. It cannot be identified as an object, therefore making a simple definition for intelligence is quite difficult (Sayar and Dinç, 2008:85).

Organizations should have effective decision making and problem solving abilities. In order to accomplish this, information and communication processes are required. When examined from the organizational point of view, intelligence contribute to dynamism of the organization by connecting information and communication concepts in order to attain the expected results (Eroğlu, 2003:247)

## **2.3. Emotional Intelligence**

Salovey and Mayer's researches in 1990 showed a relationship between intelligence and emotion which led to the concept of emotional intelligence. Salovey and Mayer defined emotional intelligence as an individual's ability to observe the people in the environment, ability to track his own feelings and ability to impose these feelings into his actions and opinions (Mayer and Solovey, 1993:433).

Reuven Bar-On defined emotional intelligence as individual's sum of abilities to define his own feelings and reflecting these feelings to the people in the same environment and also the ability to make other people realize these feelings and making good relations with them (Bar-On, 2006:6).

There are lots of definitions of emotional intelligence and a lot of different opinions in different field of sciences. Therefore, emotional intelligence is discussed in two models which are talent based model and mixed model. In talent based model, emotional intelligence is stated as a form of intelligence that is based on mental abilities. However in mixed model emotional intelligence is considered as combination of mental abilities and

personal characteristics. Reuven Bar-On model, Cooper and Swaf model and Goleman model are considered as mixed models (Doğan and Şahin, 2007:233).

#### J. Mayer & P. Solovey Model

Since the model is called as emotional sufficiency by researchers and resembles Gardner's intelligence concept, emotional intelligence was used instead of emotional sufficiency (Solovey and Mayer, 1990:189). In 1997, definition of emotional intelligence was extended and defined as the ability of expressing emotions correctly, blending emotions and thoughts, making rational inferences and having an influence on both his and other people's emotions (Mayer and Solovey, 1997:5). In 2000, Mayer, Salovey and Caruso defended that emotional intelligence is related to the personality rather than intelligence (Jordan et al., 2002:196). There are four dimensions of this talent based model.

- ✓ Perception, Appraisal and Expression of Emotion
- ✓ Emotional Facilitation of Thinking
- ✓ Understanding and Analyzing Emotions; Employing Emotional Knowledge
- ✓ Reflective Regulation of Emotions to Promote Emotional and Intellectual Growth

#### Reuven Bar-On Model

According to Bar-On, emotional intelligence is the personal, social and emotional qualifications that enables individuals to struggle with the expectations and enhances the ability to adapt to the environment (Bar-On et al., 2007:2). Emotional intelligence model of Bar-On is interested in the result of the success rather than the process. Bar-On model concentrates on social skills such that perceiving the emotions of other people and himself, restraining and revealing emotions, fighting with intense feelings and finding solutions for problems (Brown and Stys, 2004:11).

#### Robert K. Cooper and Ayman Sawaf Model

The correlation between emotional intelligence and the leadership is researched firstly by Robert K. Cooper and Ayman Sawaf (Deniz, 2012:48). The model Cooper and Sawaf generated is categorized as mixed model since it includes different concepts like creating future and the cognitive abilities (Çakar and Arbak, 2004:40). Cooper and Sawaf interpret the relationship between emotional intelligence and leadership as "four cornerstones" (Cooper and Sawaf, 2003:12).

- ✓ The First Cornerstone: Emotional Literacy
- ✓ The Second Cornerstone: Emotional Fitness
- ✓ The Third Cornerstone: Emotional Depth
- ✓ The Fourth Cornerstone: Emotional Alchemy

#### Daniel Goleman Model

Daniel Goleman model is based on Mayer and Solovey's model. To assess the importance of emotional intelligence in work life Goleman changed Mayer and Solovey's model into a very useful one (Goleman, 2015:389). Goleman describes the emotional intelligence as taking action, progressing despite the problems, postponing satisfaction by controlling the impulses, adjusting mood, empathizing and cherishing the hope (Deniz, 2012:50). According to Goleman, emotional intelligence comprises of five main emotional and social qualifications (Goleman, 2015:389).

- ✓ Self-Awareness

- ✓ Self-Regulation
- ✓ Motivation
- ✓ Empathy
- ✓ Social Skills

### 3. CONCEPT OF LEADERSHIP

Leadership is literally defined as leading and influencing specific individuals and groups (Koçel, 2014:668). MacGregor defines leadership as leading group members to achieve the goal of a group or himself by using political, economic and similar powers of people (MacGregor, 2010:425).

Leadership definitions cannot describe the boundaries of leadership clearly (Bakan, 2009:140). Leadership is known as the most endeavored but the least understood and defined topic all around the world (Bass, 1990:17). Therefore, leadership becomes to be the most researched concept and the new approaches are tried to be suggested. Within the scope of these approaches, Kouzes and Posner have developed the scale of leadership practices under five topics in order to evaluate the characteristics to become a good leader:

#### Model the Way

According to Kouzes and Posner, leader should introduce personal values clearly and express his unique personality transparently. If the leader is reluctant and doesn't have the unique personality, he tends to imitate other people's behaviors, gestures and words. Leaders who imitate others lose their credibility. Leaders should create mutual values and show their respects towards the common values in order to guide. Since mutual values contribute building productive relationships, providing harmony and sustainability, they stimulate the commitment between leader and subordinates. Therefore, employees pay attention to their jobs and productivity is increased (Kouzes and Posner, 2008:1).

#### Inspire a Shared Vision

Leader should gather employees together on common groups in order to lead them to the vision that he dreams. Leader should convince employees to understand their needs and field of interests. Hence, leader should have detailed information about dreams, hopes, wishes opinions and values of employees. He should create goal congruence and give hope by showing that the dream is for the common benefit. In other words, leader should make his desire to succeed and enthusiasm contagious (Abu-Tineh et al., 2009:269).

#### Challenge the Process

Kouzes and Posner state that the first stage for growing, improving and innovation is seeking the opportunities. This approach is based on listening individuals and paying attention to their preferences. Leader who challenges the process is the pioneer about seeking opportunities. He encourages his employees for innovation and development. He builds trust and leads them to gain a victory. Every victory builds trust about long term success. Failures are interpreted as valuable experiences about learning (Kouzes and Posner, 2008:2).

#### Enable Others to Act

Encouraging employees about their development is enabling them to act. According to Kouzes and Posner, success requires team work. Likewise, team work requires

responsibility and collaboration. These acts are very important to accomplish big dreams. Therefore, it should be given an opportunity to employees for improving skills by increasing their autonomy (Abu-Tineh, 2009:269).

#### Encourage the Heart

Encouraging the heart practice involves sincere behaviors and interest in order to raise the morale of individuals among the team. It is asserted that the contribution of the individual to the team should be aware of and individual superiorities should be appreciated. By creating team spirit, success and values should be celebrated. It is aimed to constitute programs which reward performance of individuals and therefore, behaviors along with the values can be arranged (Kouzes and Posner, 2008:2).

## **4. METHOD**

This part of the study includes the aim of the research, population and sample and instructions about the evaluation instruments.

### **4.1. Aim of the Research**

Aim of the research is to determine the relationship between the emotional intelligence levels and leadership intentions of the white-collar employees of the company which is operating in defense industry.

### **4.2. Population and Sample of the Research**

Population of the research is a company which operates in defense industry in Ankara. The company refuses to disclose its name in this study due to their privacy policy. 207 white-collar employees from this company are chosen as a sample to represent the population.

### **4.3. Data Gathering Instruments**

The data gathering instruments used in this research are divided into three parts. The first part includes demographic factors survey, the second part includes Emotional Intelligence Scale and the third part includes Leadership Practices Scale. The survey includes the total of 55 questions. 5-point likert-type scale is used in the survey. Participants answered the survey based on their levels of agreement which is ranging from 1=never 2=rarely 3=sometimes 4=usually 5=always.

#### Demographic Factors Survey

Aim of this part is to gather personal information from participants. There are 8 questions about the individual's demographic characteristics.

#### Emotional Intelligence Scale

Emotional Intelligence Scale comprises of 16 items which are developed by Wong and Law (2012). 4 dimensions of emotional intelligence are analyzed in this scale. These dimensions are Self Emotional Appraisal, Others' Emotional Appraisal, Regulation of Emotion and Use of Emotion.

#### Leadership Practices Scale

Leadership Practices Scale comprises of 30 items which are developed by Kouzes and Posner (2003). 5 dimensions of leadership practices are analyzed in this scale. These dimensions are, Model the Way, Inspire a Shared Vision, Challenge the Process, Enable Others to Act and Encourage the Heart.

**4.4. Factor Analysis**

16 items of 4 factors of emotional intelligence developed by Wong and Law are analyzed. As a result of the analysis items are gathered under five factors. For this reason, the 12th statement which generates the 5th factor is taken out and is not included in the analysis. After the 12th item is taken out, intended factor results are obtained. Table 1 shows the results of the factor analysis of Emotional Intelligence Scale.

Table 1: Factor Analysis of Emotional Intelligence

Emotional Intelligence Items and Dimensions		Component			
		Factor 1	Factor 2	Factor 3	Factor 4
6	Self Emotional Appraisal	,725			
10		,712			
13		,808			
16		,530			
1	Others' Emotional Appraisal		,784		
3			,837		
5			,608		
7			,628		
2	Regulation of Emotion			,725	
4				,621	
11				,719	
14				,720	
8	Use of Emotion				,746
9					,744
15					,672

As a result of the factor analysis of leadership scale which is developed by Kouzes and Posner, items are unexpectedly classified under 7 factors and their factor values were too dispersed to be classified under 5 factors. For this reason, the result of factor analysis of leadership scale is ignored. In this research, well accepted 5 factor version of the analysis is used.

Table 2: Leadership Practices Dimensions

Leadership Practices	Items
Model The Way	1, 6, 11, 16, 21, 26
Inspire a Shared Vision	2, 7, 12, 17, 22, 27
Challenge The Process	3, 8, 13, 18, 23, 28
Enable Others to Act	4, 9, 14, 19, 24, 29
Encourage The Heart	5, 10, 15, 20, 25, 30

**4.5. Reliability Analysis**

As a result of the reliability analysis, for the dimensions of Emotional Intelligence Scale the alpha values are evaluated as follow; for the dimension of "Self Emotional Appraisal" alpha value is 0.74, for the dimension of "Others' Emotional Appraisal" alpha value is 0.74, for the dimension of "Regulation of Emotion" alpha value is 0.72, for the dimension of "Use of Emotion" alpha value is 0.63. As an overview to Emotional Intelligence Scale, alpha value is evaluated as 0.81. If we examine the table, it can be seen that the highest alpha value in the table is the dimension of "Self Emotional Appraisal" with 0.74 alpha value. Having greater alpha value than 0.80 is considered as highly reliable (Kalaycı 2014:405).

As a result of the reliability analysis, for the dimensions of leadership scale alpha values are evaluated as follows; for the dimension of Model the Way alpha value is 0.78, for the dimension of Inspire a Shared Vision alpha value is 0.78, for the dimension of Challenge the Process alpha value is 0.78, for the dimension of Enable Others to Act alpha value is 0.78, for the dimension of Encourage the Heart alpha value is 0,78 and for the general leadership level alpha value is 0.91. As an overview to Leadership Practices Scale alpha value is evaluated as 0.81.

#### 4.6. The Techniques Used to Analyze the Data

The data gathered through research is analyzed via Stata 13.0 and IBM SPSS (Statistical Package for Social Sciences) 22.0. Normality analysis is applied before testing the hypotheses of the research. As a result of Kolmogorov-Smirnov test of the Normality analysis, data do not fit to normal distribution. According to central limit theorem, if the number of observations are higher than 30 ( $n=183$ ) and the assumption that the number will approach to normal as it grows is accepted, parametric tests are used. While examining descriptive characteristics of participants, certain measures are used such as number, average, standard deviation, frequency and percentage distribution. In order to compare dimensions of emotional intelligence for their demographic characteristics, to compare two groups, Independent Samples t-test is applied and to compare more than two groups One-Way ANOVA is applied. In order to examine the relationship between the independent variable of emotional intelligence dimensions with the dependent variable of leadership practices, Regression-Correlation analyses are applied. Frequency Tables are used to show the distribution of demographic characteristics.

#### 4.7. Hypotheses of the Research

H<sub>1</sub>: “Self emotional appraisal” dimension of emotional intelligence affects “model the way” practice of leadership positively and significantly.

H<sub>2</sub>: “Self emotional Appraisal” dimension of emotional intelligence affects “inspire a shared vision” practice of leadership positively and significantly.

H<sub>3</sub>: “Self emotional Appraisal” dimension of emotional intelligence affects “challenge the process” practice of leadership positively and significantly.

H<sub>4</sub>: “Self emotional Appraisal” dimension of emotional intelligence affects “enable others to act” practice of leadership positively and significantly.

H<sub>5</sub>: “Self emotional Appraisal” dimension of emotional intelligence affects “encourage the heart” practice of leadership positively and significantly.

H<sub>6</sub>: “Others’ emotional appraisal” dimension of emotional intelligence affects “model the way” practice of leadership positively and significantly.

H<sub>7</sub>: “Others’ emotional appraisal” dimension of emotional intelligence affects “inspire a shared vision” practice of leadership positively and significantly.

H<sub>8</sub>: “Others’ emotional appraisal” dimension of emotional intelligence affects “challenge the process” practice of leadership positively and significantly.

H<sub>9</sub>: “Others’ emotional appraisal” dimension of emotional intelligence affects “enable others to act” practice of leadership positively and significantly.

H<sub>10</sub>: “Others’ emotional appraisal” dimension of emotional intelligence affects “encourage the heart” practice of leadership positively and significantly.

H<sub>11</sub>: “Regulation of emotion” dimension of emotional intelligence affects “model the way” practice of leadership positively and significantly.



H<sub>12</sub>: “Regulation of emotion” dimension of emotional intelligence affects “inspire a shared vision” practice of leadership positively and significantly.

H<sub>13</sub>: “Regulation of emotion” dimension of emotional intelligence affects “challenge the process” practice of leadership positively and significantly.

H<sub>14</sub>: “Regulation of emotion” dimension of emotional intelligence affects “others to act” practice of leadership positively and significantly.

H<sub>15</sub>: “Regulation of emotion” dimension of emotional intelligence affects “encourage the heart” practice of leadership positively and significantly.

H<sub>16</sub>: “Use of emotion” dimension of emotional intelligence affects “model the way” practice of leadership positively and significantly.

H<sub>17</sub>: “Use of emotion” dimension of emotional intelligence affects “inspire a shared vision” practice of leadership positively and significantly.

H<sub>18</sub>: “Use of emotion” dimension of emotional intelligence affects “challenge the process” practice of leadership positively and significantly.

H<sub>19</sub>: “Use of emotion” dimension of emotional intelligence affects “others to act” practice of leadership positively and significantly.

H<sub>20</sub>: “Use of emotion” dimension of emotional intelligence affects “encourage the heart” practice of leadership positively and significantly.

#### 4.8. Findings

This part of the study includes finding of the demographic factors of researchers and hypotheses.

##### 4.8.1. Statistical Data of Demographic Variables

Table 3: Demographic Factors

Variables	Frequency	Percentage
<b>Age</b>		
22-28	69	37,7
29-35	87	47,5
36-42	14	7,7
43-49	9	4,9
50 years and older	4	2,2
<b>Gender</b>		
Female	63	34,4
Male	120	65,6
<b>Marital Status</b>		
Married	91	49,7
Single	89	48,6
Divorced	3	1,6
<b>Average Monthly Expenses</b>		
500-999 TL	4	2,2
1000-1499 TL	2	1,1
1500-1999 TL	7	3,8
2000-2499 TL	9	4,9
2500-2999 TL	30	16,4
3000-3499 TL	20	10,9
3500-4000 TL	42	23,0
Other	63	34,4

Variables	Frequency	Percentage
<b>Educational Status</b>		
Undergraduate Degree	76	41,5
Postgraduate Degree	102	55,7
Doctoral Degree	5	2,7
<b>Position</b>		
Engineer	68	37,2
Specialist Engineer	45	24,6
Senior Specialist Engineer	40	21,9
Chief Engineer	13	7,1
Manager	11	6,0
Specialist	2	1,1
Senior Specialist	1	0,5
Other	3	1,6

According to results obtained from the research, when age distribution of participants are analyzed, it is seen that concentration is on the 29-35 age group with 47,5% and 22-28 age group with 37,7%. It is followed by 36-42 age group with 7,7%, 43-49 age group with 4,9%, 50 and above age group with 2,2%. When the gender of participants are examined, it is determined that the majority of participants are males with 65,6% as opposed to females with 34,4%. 49,7% of participants are married, 48,6% is single and 1,6% is divorced. When the education level is analyzed, majority has a master's degree with 55,7% and it is followed by bachelor degree with 41,5% and PhD with 2,7%. 23% of participants spend money between 3500-4000 TL, 16,4% spends between 2500-2999 TL, 10,9% spends between 3000-3499 TL, 4,9% spends between 2000-2499 TL, 3,8% spends between 1500-1999 TL, 2,2% spends between 500-999 TL, 1,1% spends between 1000-1499 and 34,4% spends outside of these price ranges. Six participants haven't given any information about their expenses. When title are examined, it is inferred that 37,2% of participants are engineers, 24,6% is expert engineer, 21,9% is senior expert engineer, 7,1% is chief engineer, 6% is manager, 1,1% is specialist, 0,5% is senior specialist and 1,6% has other titles.

#### 4.8.2. Statistical Data of Emotional Intelligence Scale

According to the result of analysis, when four main dimensions of emotional intelligence are discussed, "self emotional appraisal" dimension has the highest average. According to these data, leaders have high skills about self emotional appraisal. The lowest average is owned by "regulation of emotions" dimension. Therefore, leaders have low skills about controlling their emotions.

#### 4.8.3. Statistical Data of Leadership Practices Scale

According to the result of analysis of Leadership Practices Scale, when five main practices of leadership are discussed, "encourage the heart" practice has the highest average. According to these data, leaders have high skills on encourage the heart. The lowest average is owned by "inspire a shared vision" practice.

**4.8.4. Correlation Analysis**

Table4 Correlation Analysis of Emotional Intelligence Dimensions and Leadership Practices

DIMENSIONS		Model The Way	Inspire a Shared Vision	Challenge The Process	Enable Others to Act	Encourage The Heart
Self Emotional Appraisal	Pearson Correlation	,305**	,231**	,242**	,309**	,246**
	Sig. (2-tailed)	,000	,002	,001	,000	,001
	N	182	181	182	181	182
Others' Emotional Appraisal	Pearson Correlation	,309**	,289**	,250**	,370**	,354**
	Sig. (2-tailed)	,000	,000	,001	,000	,000
	N	182	181	182	181	182
Regulation of Emotion	Pearson Correlation	,214**	,162*	,173*	,265**	,156*
	Sig. (2-tailed)	,004	,029	,019	,000	,036
	N	182	181	182	181	182
Use of Emotion	Pearson Correlation	,295**	,307**	,363**	,195**	,150*
	Sig. (2-tailed)	,000	,000	,000	,009	,043
	N	182	181	182	181	182

The correlation between “self emotional appraisal” dimension of emotional intelligence and “model the way” practice of leadership is found to be positive and significant ( $r=0,30$ ,  $p<0,01$ ). Hypothesis 1 is confirmed.

The correlation) between “self emotional appraisal” dimension of emotional intelligence and “inspire a shared vision” practice of leadership is found to be positive and significant ( $r=0,23$ ,  $p<0,01$ ). Hypothesis 2 is confirmed.

The correlation between “self emotional appraisal” dimension of emotional intelligence and “challenge the process” practice of leadership is found to be positive and significant ( $r=0,24$ ,  $p<0,01$ ). Hypothesis 3 is confirmed.

The correlation between “self emotional appraisal” dimension of emotional intelligence and “others to act” practice of leadership is found to be positive and significant ( $r=0,30$ ,  $p<0,01$ ). Hypothesis 4 is confirmed.

The correlation between “self emotional appraisal” dimension of emotional intelligence and “encourage the heart” practice of leadership is found to be positive and significant ( $r=0,24$ ,  $p<0,01$ ). Hypothesis 5 is confirmed.

The correlation between “others’ emotional appraisal” dimension of emotional intelligence and “model the way” practice of leadership is found to be positive and significant ( $r=0,30$ ,  $p<0,01$ ). Hypothesis 6 is confirmed.

The correlation between “others’ emotional appraisal” dimension of emotional intelligence and “inspire a shared vision” practice of leadership is found to be positive and significant ( $r=0,28$ ,  $p<0,01$ ). Hypothesis 7 is confirmed.

The correlation between “others’ emotional appraisal” dimension of emotional intelligence and “challenge the process” practice of leadership is found to be positive and significant ( $r=0,25$ ,  $p<0,01$ ). Hypothesis 8 is confirmed.

The correlation between “others’ emotional appraisal” dimension of emotional intelligence and “others to act” practice of leadership is found to be positive and significant ( $r=0,37$ ,  $p<0,01$ ). Hypothesis 9 is confirmed.

The correlation between “others’ emotional appraisal” dimension of emotional intelligence and “encourage the heart” practice of leadership is found to be positive and significant ( $r=0,35$ ,  $p<0,01$ ). Hypothesis 10 is confirmed.

The correlation between “regulation of emotion” dimension of emotional intelligence and “model the way” practice of leadership is found to be positive and significant ( $r=0,29$ ,  $p<0,01$ ). Hypothesis 11 is confirmed.

The correlation between “regulation of emotion” dimension of emotional intelligence and “inspire a shared vision” practice of leadership is found to be positive and significant ( $r=0,33$ ,  $p<0,01$ ). Hypothesis 12 is confirmed.

The correlation between “regulation of emotion” dimension of emotional intelligence and “challenge the process” practice of leadership is found to be positive and significant ( $r=0,36$ ,  $p<0,01$ ). Hypothesis 13 is confirmed.

The correlation between “regulation of emotion” dimension of emotional intelligence and “others to act” practice of leadership is found to be positive and significant ( $r=0,19$ ,  $p<0,01$ ). Hypothesis 14 is confirmed.

The correlation between “regulation of emotion” dimension of emotional intelligence and “encourage the heart” practice of leadership is found to be positive and significant ( $r=0,15$ ,  $p<0,01$ ). Hypothesis 15 is confirmed.

The correlation between “use of emotion” dimension of emotional intelligence and “model the way” practice of leadership is found to be positive and significant ( $r=0,21$   $p<0,01$ ). Hypothesis 16 is confirmed.

The correlation between “use of emotion” dimension of emotional intelligence and “inspire a shared vision” practice of leadership is found to be positive and significant ( $r=0,16$   $p<0,01$ ). Hypothesis 17 is confirmed.

The correlation between “use of emotion” dimension of emotional intelligence and “challenge the process” practice of leadership is found to be positive and significant ( $r=0,17$   $p<0,01$ ). Hypothesis 18 is confirmed.

The correlation between “use of emotion” dimension of emotional intelligence and “others to act” practice of leadership is found to be positive and significant ( $r=0,26$   $p<0,01$ ). Hypothesis 19 is confirmed.

The correlation between “use of emotion” dimension of emotional intelligence and “encourage the heart” practice of leadership is found to be positive and significant ( $r=0,15$   $p<0,01$ ). Hypothesis 20 is confirmed.

## 5. CONCLUSION

In today's world, organizations need leaders who provide a competitive advantage and steer to success by making a difference. In order to fulfill this aim, qualifications and power that leaders have would not be sufficient. Leaders should know how to direct their emotions and skills.

Emotions play supplementary role in organizations. This role increases the effectiveness of leaders. Therefore, there are plenty of researches conducted in different sectors and the interactions between emotional intelligence and leadership are tried to be measured.

As a result of the researches, it is observed that emotional intelligence skills are crucial factors which increase the success and effectiveness of leaders. There are supporting data about this subject.

In this research, the relationship between emotional intelligence and leadership practices is investigated and according to the findings positive results are obtained. As a result of the analyses, when the leadership levels are considered, white-collar employees working in the defense industry showed their greatest talent in the factor of "self emotional appraisal" and their worst talent in the factor of "regulation of emotion".

When leadership qualifications are considered, white-collar employees working in the defense industry showed their greatest talent in the factor of "enable others to act" and their worst talent in the factor of 'inspire a shared vision'.

When the effects of the emotional intelligence of the white-collar employees on leadership are examined, the increase in the levels of "self emotional appraisal" shows positive effects on leadership. The increase in levels of "others emotional appraisal" and "use of emotions" also shows positive impact on leadership. "regulation of emotion" shows positive effect however it is the lowest one among other factors.

When considered in general, the positive relationship between emotional intelligence and leadership is found within the white-collar employees in defense industry. An increase in the levels of emotional intelligence positively affects leadership performance and efficiency.

In order to increase the leadership qualifications of the employees, especially the aspect of "regulation of emotions" should be emphasized and training programs should be set up to increase emotional intelligence levels. Emotional intelligence test should be applied to executives besides the other selection tests.

## REFERENCES

- ABU-TINEH, A. M., KHASAWNEH, S. A. and OMARY, A. A. (2009). "Kouzes and Posner's Transformational Leadership Model in Practice", *Journal of Leadership Education*, 3(7): 265-283
- ASLAN, Ş. (2009). *Duygusal Zekâ ve Dönüşümcü Etkileşimci Liderlik*, Nobel Yayın Dağıtım, Ankara.
- BAKAN, İ. (2009). *Liderlik Tarzları ile Örgüt Kültürü Türleri Arasındaki İlişkiler: Bir Alan Çalışması*, Tisk Akademi, 4(7): 138-172.
- BAR-ON, R., MAREE, J. G. and ELIAS, M. J. (2007). *Educating People to Be Emotionally Intelligent*, Praeger Publishers, London.

- BAR-ON, R. (2006). "The Bar-On Model of Emotional-Social Intelligence (ESI)", *Psicothema*, 18(6): 13-25.
- BASS, B. M. (1990). *Bass & Stogdill's Handbook of Leadership: Theory, Research and Managerial Applications*, The Free Press, New York.
- BROWN, S. L. and STYS, Y. (2004). "A Review of the Emotional Intelligence Literature and Implications for Corrections", Research Branch Correctional Service of Canada, Ottawa.
- COOPER, R. and SAWAF, A. (2003). *Liderlikte Duygusal Zekâ, (Çev.) AYMAN, Z. B., Sistem Yayıncılık, İstanbul.*
- ÇAKAR, U. and ARBAK, Y. (2004). "Modern Yaklaşımlar Işığında Değişen Duygu-Zekâ İlişkisi ve Duygusal Zekâ", *Dokuz Eylül Üniversitesi, Sosyal Bilimler Enstitüsü Dergisi*, 6(3): 23-48.
- DENİZ, M. (2012). "Duygusal Zekâ Boyutları ile Liderlik Uygulamaları Arasındaki İlişki", *e-Journal of New World Sciences Academy*, 7(2): 45-66.
- DOĞAN, S. and ŞAHİN, F. (2007) "Duygusal Zekâ: Tarihsel Gelişimi ve Örgütler İçin Öneme Kavramsal Bir Bakış", *Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*", 16(1): 232-252.
- EROĞLU, E. (2003). "Organizasyonel Zekanın Gelişmesinde Örgütsel İletişimin Rolü", *Kurgu Dergisi*, 20(1): 245-254.
- GOLEMAN, D. (2016). *Duygusal Zeka Neden IQ'dan Daha Önemlidir?, (Çev.) SEÇKİN YÜKSEL, B., Varlık Yayınları, İstanbul.*
- GOLEMAN, D. (2015). *İşbaşında Duygusal Zekâ, (Çev.) BALKARA, H., Varlık Yayınları, İstanbul.*
- JORDAN, P., ASHKANASY, N. M., HARTEL, C. E. J. and HOOPER, G. S. (2002). "Workgroup Emotional Intelligence Scale Development and Relationship to Team Process Effectiveness and Goal Focus", *Human Resource Management Review*, 12(2): 195-214.
- KALAYCI, Ş. (2014). *SPSS Uygulamalı Çok Değişkenli İstatistik Teknikleri, Asil Yayınları, Ankara.*
- KOÇEL, T. (2014). *İşletme Yöneticiliği, Beta Yayınları, İstanbul.*
- KONRAD, S. and HENDL, C. (2003). *Duygularla Güçlenmek, (Çev.) TAŞTAN, M., Hayat Yayıncılık, İstanbul.*
- KOUZES, J. M. and POSNER, B. Z. (2013). *Leadership Practices Inventory Facilitator's Guide*, Pfeiffer, San Francisco.
- KOUZES, J. M. and POSNER, B. Z. (2008). *The Leadership Challenge, Audio-Tech Business Book Summaries, San Francisco.*
- KULAKSIZOĞLU, A. (2008). *Ergenlik Psikolojisi, Remzi Kitapevi, İstanbul.*
- MACGREGOR BURNS, J. (2010). *Leadership, Harper Perennial, New York.*
- MAYER, J. D., SOLOVEY, P. and CARUSO, D. R. (2000). "Emotional Intelligence Meets Traditional Standards for an Intelligence", *Intelligence*, 27(4): 267-298.

C.21, S.4 The Relationship Between Emotional Intelligence Dimensions And Leadership Practices:

- MAYER, J. D. and SOLOVEY, P. (1997). What is Emotional Intelligence?, In P. Solovey & D. J. Sluyter (Eds.) Emotional Development and Emotional Intelligence, Basic Books, New York.
- MAYER, J. D. and SOLOVEY, P. (1993). "The Intelligence of Emotional Intelligence", Intelligence, 17(4): 433-442.
- SAYAR, K. and DİNÇ, M. (2008). Psikolojiye Giriş, Dem Yayınları, İstanbul.
- SMIDT, R. K., LEVINE, D. M. and RAMSEY, P. P. (2001). Applied Statistics for Engineers and Scientists, Prentice Hall, New Jersey.
- SOLOVEY, P. and MAYER, J. D. (1990). "Emotional Intelligence", Imagination - Cognition and Personality, 9(3): 185-212.
- TİTREK, O. (2007). IQ'dan EQ'ya Duyguyları Zekice Yönetme, Pegem Yayıncılık, Ankara.
- WONG, C. S. and LAW, K.S. (2002). "The Effect of Leader and Follower Emotional Intelligence on Performance and Attitude: An Exploratory Study", Leadership Quarterly, 13(3): 243-274.