

# Exploring the Relationship between Ethical Leadership and Job Satisfaction with the Mediating Role of the Level of Loyalty to Supervisor

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**Abstract**: The purpose of this study was to examine the impact of ethical leadership behaviour on employees' both intrinsic and extrinsic job satisfaction and also to find out a possible mediator effect of loyalty to supervisor in this relationship. A total of 223 academic and administrative staff who worked in Gümüşhane University in Turkey constituted the sample of the study. Mediation analysis was used to test the research model. Findings of our analysis have confirmed that ethical leadership is effective on loyalty to supervisor and also loyalty to supervisor increases employees' job satisfaction. It was understood that from the intrinsic dimension side of job satisfaction, indirect effect had been defined over "Extra Effort for Supervisor, Identification with Supervisor and Internalization of Supervisor's Values" dimensions of loyalty to supervisor. On the extrinsic dimension side of job satisfaction, "Dedication and Attachment to Supervisor (Ded\*Attach), Identification with Supervisor and Internalization Supervisor's Values" dimensions of loyalty to supervisor variable had mediated the relationship between ethical leadership and job satisfaction. Briefly, as a result of mediator analysis we confirmed that a certain part of the relationship between ethical leadership and job satisfaction came out over loyalty to supervisor.

**Keywords**: Ethical leadership, loyalty to supervisor, job satisfaction, intrinsic and extrinsic job satisfaction, mediation model.

JEL Classification: M10, M12, M19

### 1. Introduction

There is a need and a growing interest to understand the incentive factors that affect the workforce within the framework of satisfaction of employees in higher education like as other profit-based industries and services (Toker, 2011:156). Job satisfaction of the academic staff is a very important issue for the future of the rapidly developing economies (Khalid et al., 2012: 127) especially like Turkey.

It is a fact that to gain international competitive advantage, the only way is to focus on scientific research and development. For this aim, universities are brought together with the industries on a common ground for training of skilled labour needed in all sectors for economic and social development of a country. This makes the universities the biggest source of professional labour. Every type of organization needs this labour for a sustainable success. Of course academic staffs as employees play the significant key role on this process of training the labour and developing new technologies and information. Therefore it is required to maintain the job satisfaction of the academic staffs need a leader that maintain ethical standards

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which are establishing a suitable work environment. As Kennerly (1989) stated, leadership and employee job satisfaction are the two fundamental factors influencing the organization effectiveness and productivity.

Additionally, we also know from management theory that emphasizes the importance of coordinating of the organization – human relationship to enhance the productivity (Kim, 2002: 232). Focusing on productivity, scholars extensively researched in the literature both on the topics employees' job satisfaction (Fix & Sias, 2006; Ghazi et al., 2010; Gruneberg & Startup, 1978; Kim, 2009; Malik, 2011; Morgan et al., 1995; Oshagbemi, 1997; Sari, 2004; Top & Gider, 2013; Wright, 2006), and leadership styles (Bogler, 2001; Lok and Crawford, 2004; Zhu et al., 2004).

The issue of employee job satisfaction is important for both in the field of organisational psychology and in management (Oshagbemi, 1999a: 108). Among the various factors are affecting academic staffs' job satisfaction (Lacy & Sheehan, 1997; Santhapparaj & Alam, 2005; Schulze, 2006; Ssesanga & Garrett, 2005), we decided to focus on the relationship between the supervisor and the academic staff in this research. As Wasti and Can (2008) stated, commitment to supervisor has been proposed to be a better predictor of supervisor related outcomes. Thus, this variable also must be investigated in this relationship. Then this study investigates the relationship between leadership behaviour (that we focused on ethical leadership here) and job satisfaction with the mediator role of employees' loyalty to supervisor.

In this point, academic stuffs' loyalty to their supervisors is investigated as the mediator variable. In other words it is the explanatory mechanism that sheds light on the nature of the relationship that exists between leadership behaviour and job satisfaction. In mechanisms like this if no such relationship exists, then there is nothing to be mediated (Mathieu and Taylor, 2006: 1038).

It is understood from the literature review that the number of studies related to the job satisfaction among academics (Lacy & Sheehan, 1997; Long, 2005; Okpara et al., 2005; Oshagbemi, 1999a; Oshagbemi, 2000a; Oshagbemi, 2000b; Santhapparaj & Alam, 2005; Schulze, 2006; Sloane & Ward, 2001; Ssesanga & Garrett, 2005) has increased in recent years (Mustapha, 2013: 245). In general, from the studies focusing on job satisfaction of academics, it can be demonstrated that academics are generally satisfied with their works (Eyupoglu & Saner, 2009: 610). However, as Oshagbemi (1999a: 109) stated, none of these studies were involving the role of the supervisors on the satisfaction of academics although Mehboob et al. (2011: 2984) suggested that the relationship between a supervisor and subordinates influences the job satisfaction of the subordinates. Okpara & Wynn (2008: 935) revealed that there was a relationship between organizational ethical climate and job satisfaction. Therefore we concluded to research in our study the relationship between ethical leadership and job satisfaction.

This study also provides the following contributions beyond the antecedent literature as:

1. The primary interest of this study is to evaluate ethical aspects of supervisor as additive to the studies dealing with impact of management on employees' job satisfaction.

- 2. The study with its research model predicts that there can be variables that mediate the occurrence of predicted relationship between job satisfaction and ethical leadership and foremost among these variables, loyalty to supervisor can take place.
- 3. Turkey, where this study was conducted, has a special case in terms of examination of ethical behaviours.
- 4. This study has an additional significance of being made especially on academic staff. Because the definition of supervisor that made by academic staff is different from the one that made by regular employees of the other industrial or service businesses.

### 2. Conceptual Background and Hypotheses

#### 2.1. Employees' Job satisfaction

We know from the modern management theory that satisfied employees have worked more effectively if they have higher motivation and better work morale (Matzler, 2004: 1179). It could be defined employee job satisfaction as an employee's affective reaction to a job, based on a comparison between actual and desired outcomes. In other words, job satisfaction is defined as an individual's positive emotional reactions to a particular job (Oshagbemi, 1999b: 388). The rationale behind contemporary theories of motivation and job satisfaction is to provide a framework through which organizations can better influence their employees' drive to work and increase their enthusiasm with their roles (Furnham et al. 2009: 766).

The issue of job satisfaction is a very important one because of its relation with the physical and emotional wellbeing and health of employees (Oshagberni, 1999a: 108). The term "job satisfaction" was appeared in the literature in the 1940s. Then after these years literally several thousands of articles related with job satisfaction have been published (Wright, 2006: 266-267). Especially researchers have theorized and developed models to explain job satisfaction since 1950s (Toker, 2011: 157). According to one of the earliest theories i.e. Herzberg's (1968) two-factor theory, job satisfaction is a multifaceted construct and it contains both intrinsic and extrinsic job elements that influence an employee's job satisfaction in a workplace. However, as is the case with academic staff both intrinsic and extrinsic factors affect their satisfaction (Khalid et al., 2012: 127). In Herzberg's research results, he revealed that situations that leading satisfaction or contributing dissatisfaction was caused by different factors related to the work. When these factors are examined, it is understood that factors motivating individuals in their work (intrinsic) such as achievement, recognition, work itself, responsibility, growth, advancement are directly related to the content of their job. On the other hand, it turned out to be the factors causing dissatisfaction in the workplace is not related to job performance of the individuals, but related to how they are treated. These factors that causing dissatisfaction are company policy and administration, supervision, relationship with supervisor, work conditions, salary, relationship with peers, personal life, status and security. They are not related to the content of the work but they are all related to context of the work (Herzberg, 1968, 2003).

This issue must also be investigated in various cultures. Because we need to know that from which features of supervisor this effect was originated. As an example, it is an understandable situation that the employees are more satisfied under the administration of supervisors. Because these supervisors have technical ability or managerial features which can transport themselves to their purposes in western cultures and of course these cultures are showing more individual characteristics (Hofstede, 1980; Hofstede et al 2010). But in cultures such as Turkish society, ethical aspects of these results can be important rather than emerging results. In this regard, impact of ethical leadership behaviour of a supervisor on the employees' intrinsic satisfaction is an issue that should be investigated. In the light of the foregoing, if we think about the employees such as in Turkish society, some mediating mechanisms should become the part of the activities that adding meaning to the relationship that in case to reach an output like satisfaction. When the mentioned cultural features come into question, the belief to the ethical characteristics of the supervisor will bring a sense of loyalty to him/her. The belief of the employees that their supervisor always does the right thing both in his/her personal and business life will make them to adopt their supervisor as a father/mother that guiding them. Hence, this occurred sense of loyalty will result with satisfaction of the employees in their works in this conversion.

# 2.2. Leadership Style: Ethical Leadership

Especially after the big ethics scandals in all type of organizations in the worldwide, researchers turned their attention to the concepts such as ethics and ethical leadership (Avey et al., 2012; Ben-Hur ve Jonsen, 2012; Brown & Treviño, 2006; Brown et al., 2005; Ciulla, 1995; Ciulla, 2005; Ciulla, 2009; Dion, 2012; Ghahroodi et al., 2013: 91; Kanungo, 2001; Mahsud et al., 2010; Mihelič et al., 2010; Morgan, 1993; Neubert et al., 2009; Piccolo et al., 2010; Ponnu & Tennakoon, 2009; Winston, 2005; Zhu et al., 2004). Although much has been said about the importance of ethical leadership, we saw that the topic has not yet been exactly measured and defined (Brown et al., 2005: 129). From Brown & Treviño (2006)'s perspective, ethical leadership is a unique and important form of leadership. From another perspective, Morgan (1993: 203) stated in his study that ethical behaviour is a component of leadership, and ethical development is necessary to an individual's success as a leader to become more effective, efficient, innovative, and successful in an organization.

As Horwitz et al. (2003) stated if supervisors exactly knew what behaviours drive job satisfaction then they wanted to adjust their behaviours to increase the employees' job satisfaction. It is expected from a supervisor that he/she has to treat their employees fairly and in an unbiased manner to make them feel good in their workplace. It has suggested that being treated fairly should affect both employees' job attitudes, such as satisfaction and commitment, and also organizational outcomes (Zhu et al., 2004: 17).

Ethical leaders distinguish themselves by exhibiting traits that are consistent with normative ethical principles such as honesty, fairness, and trustworthiness, make fair and balanced decisions. They actively consider the appropriateness of those decisions in terms of their ethical consequences (Piccolo et al., 2010: 261). Also, Kanungo (2001: 258) have pointed out that "without ethical leadership, organizations lose their long term effectiveness and become soulless structures because all forms of leadership behaviour gain their legitimacy and credibility from the leader's moral standing and integrity". Thus, organizations want to know how to select, develop and retain ethical leaders (Brown & Treviño, 2006: 613).

Ciulla, (2004) [as cited in Ponnu & Tennakoon, 2009: 22] has stated that "fundamentally, ethical leadership involves leading in a manner that respects the rights and dignity of others". Brown et al. (2005: 120) has defined ethical leadership as "the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making". In their study Avey et al. (2012: 21) have asserted that the character of an individual leader is important for positive outcomes in organizations particularly associated with their employees such as trust and job satisfaction and Neubert et al. (2009) have indicated that there is a relationship between ethical leadership behaviour and job satisfaction in traditional organisations. Okpara & Wynn (2008: 935) have revealed that there is a relationship between organizational ethical climate and job satisfaction. Thus, they also have concluded in their study that favourable organizational ethical climate would encourage commitment and job satisfaction. So, it is understood that employee job satisfaction is a central construct in organizational studies and is more likely influenced by ethical behaviours of a leader (Avey et al., 2012: 22). An ethical leader who has behaviours such as honesty, trustworthiness, caring and concern for others has positive effects on the attitudes of employees (Brown & Treviño, 2006; Brown et al., 2005; Kanungo, 2001).

On the basis of this literature, we posit the following hypothesis:

H<sub>1</sub>: Ethical leadership will increase employees' job satisfaction.

H<sub>1a</sub>: Ethical leadership will increase employees' intrinsic job satisfaction.

H<sub>1b</sub>: Ethical leadership will increase extrinsic job satisfaction of the employees.

### 2.3. Loyalty to Supervisor

Loyalty has been considered as a synonym of commitment in the literature. In recent years researchers have turned their attention to multiple commitments. One of these is commitment/loyalty to supervisors. Because supervisor's behaviour has an impact on subordinate's or employee's job satisfaction (Chen et al, 2002: 339). According to Mehboob et al. (2011: 2984), supervisor behaviours can affect employee job satisfaction, commitment and productivity.

According to social identity theory, subordinates tend to identify with supervisors who possess valued positive attributes. Subordinates are also likely to internalize the valued positive attributes of their supervisors such as supervisor's ethical standards. A supervisor who displays ethical behaviour helps subordinates to develop trust, commitment, and positive interpersonal relationships in the workplace. Thus, a supervisor's ethical behaviour should be a predictor of the affect-based loyalty of subordinates (Jiang & Cheng, 2008: 215). Also Wu et al. (2012: 145) states that supervisors show more individual interest to employees who are more loyal to them. Chen et al. (2002: 343) have pointed out that an employee with a strong degree of loyalty to the supervisor may be more motivated to perform well because of the employee's belief that the supervisor will observe and reward his or her good performance.

To analyse the construct of loyalty to supervisor, Becker et al. (1996) defined two dimensions: identification with supervisor and internalization of supervisor's values. Also Chen et al. (2002) used a five-dimensional model in their study. These dimensions are identification with supervisor, internalization of supervisor's values, dedication to supervisor, extra effort for supervisor, and attachment to supervisor. We decided to use Chen et al. (2002)'s model in this study. However, although Chen et al. (2002) have obtained a five-factor structure, it was seen in our research results that variables such as dedication to supervisor and attachment to supervisor (DED\*ATTACH) as a result of applied EFA. Consequently, we decided to propose four dimensions to analyse the construct of loyalty to supervisor.

According to previous thoughts we posit the following additional hypothesis:

H<sub>2</sub>: Ethical leadership will increase the levels of employee's loyalty to supervisor.

H<sub>2a</sub>: Ethical leadership will increase the employee's DED\*ATTACH levels.

 $H_{2b}$ : Ethical leadership will increase the employee's EFFORT levels.

H<sub>2c</sub>: Ethical leadership will increase the employee's IDENTIFICATION levels.

H<sub>2d</sub>: Ethical leadership will increase the employee's INTERNALIZATION levels.

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m H_3}$ : Loyalty to supervisor has the mediator effect on the relationship between ethical leadership and intrinsic satisfaction.

 $H_{3a}$ : DED\*ATTACH has the mediator effect on the relationship between ethical leadership and intrinsic satisfaction.

 $H_{3b}$ : EFFORT has the mediator effect on the relationship between ethical leadership and intrinsic satisfaction.

 $H_{3c}$ : IDENTIFICATION has the mediator effect on the relationship between ethical leadership and intrinsic satisfaction.

 $H_{3d}$ : INTERNALIZATION has the mediator effect on the relationship between ethical leadership and intrinsic satisfaction.

 $H_4$ : Loyalty to supervisor has a mediator effect on the relationship between ethical leadership and extrinsic satisfaction.

 $H_{4a}$ : DED\*ATTACH has a mediator effect on the relationship between ethical leadership and extrinsic satisfaction.

 $H_{4b}\!\!:$  EFFORT has a mediator effect on the relationship between ethical leadership and extrinsic satisfaction.

 $H_{4c}$ : IDENTIFICATION has a mediator effect on the relationship between ethical leadership and extrinsic satisfaction.

 $H_{4d}$ : INTERNALIZATION has a mediator effect on the relationship between ethical leadership and extrinsic satisfaction.

#### 3. Methodology

#### 3.1. Research Model

The study's research model which was developed within the framework of antecedent literature and theoretical assumptions suggested that the level of ethical leadership of a supervisor would be effective on subordinate's or employee's job satisfaction and the level of loyalty to supervisor would play an intermediary (mediator) role in this relationship.

The basic assumption here is based on the projections that employees who are evaluating their supervisors, depending on the level of perceived ethical leadership behaviour of their supervisors, will develop loyalty to their supervisors and depending on the level of this loyalty their job satisfaction will increase in a conversion.

In this context, it was expected that the level of loyalty to the supervisor as mediating variable (mediator) would explain the relationship between ethical leadership and job satisfaction and "how and why this relationship ensued (Baron & Kenny, 1986: 1176)".

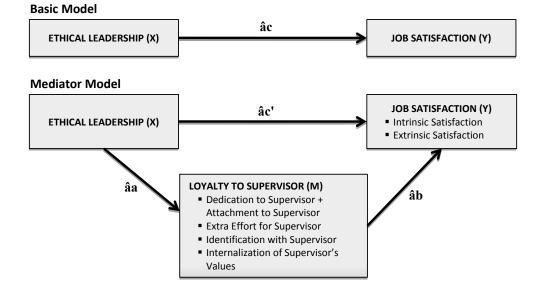


Figure 1. Research Model

In mediator model which was developed to test these assumptions (Figure 1), Total effect ( $\beta$ c) could be tested separately both as direct effect ( $\beta$ c ') of independent variable (ethical leadership) on dependent variable (job satisfaction), and indirect effect ( $\beta$ a. $\beta$ b) which was the effect that defined over loyalty to supervisor.

Total effect represents the sum of direct and indirect effects ( $\beta c = \beta c' + \beta a.\beta b$ ) (Hayes, 2009: 408-409; MacKinnon et al., 2000: 173-174; Preacher & Hayes, 2004: 717-718). If such an equation is interpreted, the occurrence of a mediator relationship, in other words the significance of indirect effect can bring forward two different situations. In the first case when indirect effect ( $\beta a.\beta b$ ) is equal to the total effect ( $\beta c$ ) then the direct effect ( $\beta c'$ ) which

is defined in the mediator model will be meaningless. This situation which is known as perfect (Baron & Kenny, 1986: 1177) or complete mediation (James & Brett, 1984) [as cited in Preacher & Hayes, 2004: 717] and in fact that expresses relationship between ethical leadership and job satisfaction. This is completely a relationship that is defined over the variable "loyalty to supervisor". In the case when the indirect effect ( $\beta a.\beta b$ ) is smaller than the total effect ( $\beta c$ ), partial mediation (Preacher & Hayes, 2004: 717) relationship will come out. Then, this situation is interpreted likewise a part of the relationship between ethical leadership and job satisfaction is out as direct effect ( $\beta c$ ) and the other part is defined over loyalty to supervisor as indirect effect ( $\beta a.\beta b$ ).

# 3.2. Sampling Process

In accordance with purpose and limitations of the research, the universe of this study was constituted by the academic and administrative<sup>1</sup> staffs who have worked in Gümüşhane University in Turkey  $(N=849)^2$ . The following formulation was used to calculate the sample size (Baş, 2008: 39):

$$n = N t^2 pq/d^2 (N-1) + t^2 pq$$

According to this formula, the required sample size is determined as 204 people when the level of significance is received  $\alpha$ =0,05 and the margin of error is received d=0,06. The Simple Random Sampling Method (Bryman & Cramer, 1997: 99) was used for sample selection from the universe. In the sampling process it was requested from randomly selected academic and administrative staff to complete a questionnaire with face-to-face interviews. As a result of this process, a total of 223 academic and administrative staff who accepted to answer the questionnaire was constituted the sample of the study (Table 1).

		Frequency	Percentage (%)
Candan	Woman	62	27,8
Gender	Man	161	72,2
	18 – 25	22	9,9
1	26 – 35	134	60,1
Age	36 – 45	51	22,9
	46 and over	16	7,2
	Total	223	100

Table 1. Demographic Characteristics of the Staff in the Sample

According to Table 1, the majority of respondents (72.2%) were male and more than half (60.1%) were in the range of 26 to 35 years old.

# **3.3.** The Scales Used in the Study, Reliability and Validity Analysis

Survey method was used with the aim of collecting data in the study. The questionnaire form was developed from three main parts. In the first part of the questionnaire, questions for determining demographic characteristics such as gender and age were included. In the second part, there were 27 questions. While the first 10 of these questions were intended to measure the concept of ethical leadership behaviour, remaining 17 questions were to measure the concept of loyalty to supervisor. There were 20 questions in the third part of the questionnaire to measure the concept of job satisfaction. In second

<sup>&</sup>lt;sup>1</sup>Administrative staffs are also academicians who also have administrative works.

and third parts of the questionnaire, alternative answers ranging from 1 (strongly disagree) to 5 (strongly agree) were located on a five-point Likert-type response scale and respondents answered questions ranging from 1 (strongly disagree) to 5 (strongly agree).

Questions were taken from the study of Brown et al. (2005) to measure the ethical leadership (ETHICAL). All questions were gathered under a single factor and expressed the ethical leadership level in our study.

The scale of loyalty to supervisor was obtained from the study of Chen et al. (2002). In this scale there were five dimensions such as dedication to supervisor (DED) (four questions), extra effort for supervisor (EFFORT) (three questions), attachment to supervisor (ATTACH) (four questions), identification with supervisor (IDEN) (three questions) and internalization of supervisor's values (INTERN) (three questions).

Minnesota Satisfaction Questionnaire (MSQ) which was developed by Weiss et al. (1967) [as cited in Moore (2009: 184-185)] was used to measure of job satisfaction. Questions from an inventory consisting of 20 items were asked to respondents. In this inventory, intrinsic satisfaction (INTRINSIC) was represented with 12 questions and extrinsic satisfaction (EXTRINSIC) was represented with 6 questions. The remaining two questions were included neither intrinsic nor extrinsic dimensions. They have measured overall job satisfaction (Moore, 2009: 96).

Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were used to test the structural validity of the scales in this study. Also Cronbach's Alpha Method that evaluating the internal consistency of the scale items was used to test the reliability.

The results of EFA, CFA and reliability analysis that were applied to demonstrate factor structure of the questions of ethical leadership were summarized in Table 2. Principal Component Method was used as Factor Derivation Method by referencing Brown et al. (2005) in applied EFA. Furthermore, Direct Oblimin Rotation was applied. It is a method that allows the correlation between the factors (Albayrak, 2006: 165).

**Table 2.** Results of Exploratory Factor Analysis, Confirmatory Factor Analysis and Reliability

 Analysis for Ethical Leadership Scale

		ETHICAL
Items		EFA / CFA
E1- Conducts h/h personal life in an ethica	il manner	,798 /,767
E2- Defines success not just by results but	also the way that they are obtained	,793 /,761
E3- Listens to what employees have to say	,310 / ,267	
E4- Disciplines employees who violate eth	ical standards	,689 / ,643
E5- Makes fair and balanced decisions		,853 / ,840
E6- Can be trusted		,835 / ,820
E7- Discusses business ethics or values wit	h employees	,763 / ,724
E8- Sets an example of how to do things the	ne right way in terms of ethics	,845 / ,825
E9- Has the best interests of employees in	mind	,828 / ,807
E10- When making decisions, asks "what i	s the right thing to do?"	,776 / ,748
EFA: Explained Variance	Total Variance Explained (%)	58,459
EFA: KMO and Barlett's tests	Kaiser-Meyer-Olkin (KMO) test	,941
EFA. KNO una banett s tests	Barlett's Test of Sphericity	x <sup>2</sup> =1308,71 (P<,000)
	x²/df	1,808
	NFI	,953
CFA: model fit indices	CFI	,978
	TLI	,972
	RMSEA	,060
Reliability Analysis	Cronbach's Alpha*	,914

\* Cronbach's Alpha was computed based on standardized items

As summarized in Table 2, as a result of EFA, all questions of ethical leadership collected under a single factor. It is seen that this one-dimensional structure is also consistent with the findings of Brown et al. (2005). The obtained factor describes 58.459% of the total variance. The results of the applied Bartlett's Test of Sphericity ( $x^2$ =1308,71; P<,000) and KMO Sample Suitability Test (,941) provide evidence to appropriateness of the data to the factor analysis (Albayrak, 2006: 130-131). In addition, CFA was made to test the appropriateness of the obtained factor structure with the data. CFA has shown that the appropriateness of the obtained one-dimensional factor structure with data was satisfactory ( $x^2$ /df=1,808; NFI=,953; CFI=,978; TLI=,972; RMSEA=,060). The results of the applied reliability analysis has shown that the reliability of this obtained factor was an acceptable level ( $\alpha$ =,914).

The results of the EFA, CFA and reliability analysis for the scale of Loyalty to Supervisor were summarized in Table 3. Firstly, two questions, one was from Attachment to Supervisor (ATTACH) dimension and the other was from Extra Effort for Supervisor (EFFORT) dimension were excluded from the scale by taking into account the findings of applied EFA and reliability analysis. Principal Component Method was used as Factor Derivation Method in EFA. "Varimax Orthogonal Factor Rotation Method" was preferred in applied factor analysis. This is the most commonly used and well known method with the ability to separate the factors more clearly (Albayrak, 2006: 163).

As seen in Table 3, Although Chen et al. (2002) had obtained a five-factor structure; variables in our study were gathered under four factors as a result of applied EFA. When the factor loadings were examined, it was seen that variables such as dedication to supervisor and attachment to supervisor were gathered under a common factor. Based upon the features of the included questions, this factor was named as dedication and attachment (DED\*ATTACH) in this study.

The four-factor structure describes 69.237% of the total variance. The results of the applied Bartlett's Test of Sphericity ( $x^2$ =1802,17; P<,000) and KMO Sample Suitability Test (,89) provide evidence to appropriateness of the data to the factor analysis (Albayrak, 2006: 130-131). As a result of CFA, obtained fit indexes have shown that the appropriateness of the obtained structure with data was satisfactory<sup>3</sup> ( $x^2$ /df=2,326; NFI=,901; CFI=,940; TLI=,920; RMSEA=,077). The results of the reliability analysis for factors have shown that an acceptable level of reliability was achieved.

Reliability and validity analysis of the job satisfaction scale were summarized in Table 4. During the EFA by using Principal Component Analysis (PCA) and Varimax Orthogonal Factor Rotation, 5 questions that simultaneously loaded more than one factor were excluded from the scale. Three of these 5 questions that excluded from the scale represented the intrinsic satisfaction dimension. One excluded question represented the extrinsic satisfaction dimension. Another excluded question that loaded more than one factor was not included either intrinsic or extrinsic dimensions but included in one of the two questions that expressing overall job satisfaction. Another question factor. And one question like "...in terms of working conditions..." was conceptually regarded closer to extrinsic satisfaction dimension and included in this factor. The obtained factors described 56.796% of the total variance.

<sup>&</sup>lt;sup>3</sup>Modified model belong to four-dimensional structure was used.

	DED. + ATTACH.	EFFORT	IDENT.	INTERN.
Items	EFA / CFA	EFA / CFA	EFA / CFA	EFA / CFA
A1- When my supervisor is treated unfairly; I will defend him/her.	,673 / ,556			
A2- When somebody speaks ill of my supervisor, I will defend him/her immediately.	,657 / ,559			
A3- I will put myself in my supervisor's position to consider his/her interests.	,626 / ,520			
A4- I would support my supervisor under all circumstances.	,580 / ,650			
C2- I would feel satisfied as long as I can work under my supervisor.	,655 / ,829			
C3- No matter whether it will benefit me or not, I will be willing to continue working under my supervisor.	,678 / ,840			
C4- If it is possible, I would like to work under my supervisor for a long time.	,703 / ,846			
B1- Even if my supervisor is not present, I will try my best to do the job assigned by him/her well.		,866 /,804		
B2- I will try my best to accomplish the job assigned by my supervisor.		,831 / ,689		
D1- When someone praises my supervisor, I take it as a personal compliment.			,785 / ,917	
D2- When someone criticizes my supervisor, I take it as a personal insult.			,861 / ,838	
D3- My supervisor's successes are my successes.			,634 / ,693	
E1- My attachment to my supervisor is primarily based on the similarity of my values and those				001 / JEO
represented by my supervisor.				6C1, 1 LUS,
E2- The reason I prefer my supervisor than another is because of what he/she stands for, that is, his/her				LJL / COL
values.				701'1 601'
E3- Since starting this job, my personal values and those of my supervisor have become more similar.				,647 / ,800
% of Variance	23,182	17,616	17,456	10,982
EFA: Explained Variance Total Variance Explained (%)		69,237	237	
Kaiser-Mever-Olkin (KMO) test		,890	06	
EFA: KIVIO and Barlett's tests Barlett's Test of Sphericity		x <sup>2</sup> =1802,1	7 (P<,000)	
x²/df		2,326	26	
NEI		<i>.</i> 90	10	
CFA: model fit indices CFI		<i>'6</i>	,940	
		.6'	02	
RMSEA		:oʻ	77	
Reliability Analysis Cronbach's Alpha*	869	,713	.852	.828

 Table 3. Results of Exploratory Factor Analysis, Confirmatory Factor Analysis and Reliability

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		INTRINSIC	EXTRINSIC
Items	-	EFA / CFA	EFA / CFA
T1- Being able to keep busy all the t	ime	,510 / ,475	
T2- The chance to work alone on the	e job	,548 / ,553	
T4- The chance to be "somebody" in	n the community	,520 / ,507	
T7- The chance to do things for othe	er people	,602 / ,546	
T8- The chance to tell people what t	to do	,580 / ,484	
T9- The chance to do something that	t makes use of my abilities	,845/ ,790	
T10- The freedom to use my own ju	dgment	,819 / ,886	
T11- The chance to try my own met	hods of doing the job	,817 / ,891	
T12- The feeling of accomplishment	I get from the job	,743 / ,769	
T14- The way company policies are	put into practice		,693 / ,760
T16- The praise I get for doing a goo	od job		,680 / ,729
T17- The working conditions			,706 / ,742
T18- My pay and the amount of wor	rk I do		,668 / ,663
T19- The way my boss handles his/h	ner workers		,875 / ,750
T20- The competence of my supervi	sor in making decisions		,878 / ,771
EFA: Explained Variance	% of Variance	30,459	26,337
EFA. Explained valuate	Total Variance Explained (%)	56,796	
EFA: KMO and Barlett's tests	Kaiser-Meyer-Olkin (KMO) test	,90	05
LIA. KWO und Barlett's tests	Barlett's Test of Sphericity	x <sup>2</sup> =1848,698 (P<,000)	
	x²/df	2,1	.39
	NFI	,90	01
CFA: model fit indices	CFI	,94	44
	,933 <i>TLI</i>		
	RMSEA	,0	72
Reliability Analysis	Cronbach's Alpha*	,876	,885

<b>Table 4.</b> Results of Exploratory Factor Analysis, Confirmatory Factor Analysis and Reliability
Analysis for Job Satisfaction Scale

\* Cronbach's Alpha was computed based on standardized items

The difference between the chi-square statistics were interpreted by comparing an alternative one-factor model with the obtained two-factor structure in CFA which was used to test the compatibility of the obtained factor structure and the data (Wasti, 2000: 403). In this process, firstly, the single-factor model in which all questions loaded on a single factor was tested. Fit indexes obtained from here proved that the single-factor structure did not comply with the data at a satisfactory level<sup>4</sup> ( $x^2$ /df=4,333; NFI=,797; CFI=,835; TLI=,805; RMSEA=,123). On the other hand, it was obtained data compatibility at a satisfactory level for the obtained two-dimensional structure as a result of EFA<sup>5</sup> ( $x^2$ /df=2,139; NFI=,901; CFI=,944; TLI=,933; RMSEA=,072). When it was interpreted the differences in the chi-square statistics between the two models ( $\Delta x^2$ =197.386;  $\Delta df$  =1; P<,000) it could be said that two-factor model has showed a better data compatibility than the single-factor model. Finally, the results of the reliability analysis showed that reliability was provided within the acceptable level for the dimensions of job satisfaction.

# 3.4. Analysis of Data

While creating the conceptual framework of the study and testing the mediator model, step analysis procedure that proposed by Baron & Kenny (1986) is taken as reference. However, also Sobel (1982) Test that allows statistically testing the significance of the predicted indirect effect, and Bootstrapping Methods that is insensitive to sample size and

<sup>5</sup>Modified model that belongs to two-dimensional structure was used.

<sup>&</sup>lt;sup>4</sup>Modified model that belongs to one-dimensional structure was used.

normal distribution assumptions are both used as alternative approaches<sup>6</sup> (Hayes, 2009; Preacher & Hayes, 2004).

If the procedure that recommended by Baron & Kenny (1986) was taken as reference, then in order to talk about the existence of mediating relationship, the following criteria should be provided (Baron & Kenny, 1986: 1176-1177; Preacher & Hayes, 2004: 717);

- 1. In the equation  $Y = \theta_{01} + \theta_{CX}$ ; independent variable (X) must have a significant effect on the dependent variable (Y), i.e., the total effect ( $\beta_{C}$ ) must be significant (Figure 1; Basic Model).
- 2. In the equation  $M = \beta_{02} + \beta a X$ ; independent variable (X) must have a significant effect on the mediator variable (M) (Figure 1; Mediator Model;  $\beta a$ ).
- 3. In the equation  $Y = \beta_{03} + \beta c' X + \beta b M$ ; mediator variable (M) must have a significant effect on independent variable (Y) (Figure 1; Mediator Model;  $\beta b$ )
- 4. In the equation  $Y = \beta_{03} + \beta c'X + \beta bM$ ; the effect of independent variable (X) on the dependent variable (Y) must be insignificant or must be ( $\beta c' < \beta c$ ), i.e., direct effect ( $\beta c'$ ) must be equal to zero or less than total effect ( $\beta c$ ).

SPSS macro that developed by Preacher & Hayes (2004) is used to test these defined assumptions and alternative methods in a combination (http://www.afhayes.com/spss-sasand-mplus-macros-and-code.html). As well as the tables (Table 6 and Table 7) that are formed according to the outputs of this macro are providing the ability to assess the stages that proposed by Baron & Kenny (1986), they also offer the ability to assess significance of the indirect effect according to Sobel (1982) and bootstrapping methods. The value of z that is calculated for the significance of the Sobel (1982) Test, must be statistically significant (z < ,05). Bootstrap Method can only be significant if 95% confidence interval range (LL95% CI – UL95%CI) must not contain a zero value (Hayes, 2009; Preacher & Hayes, 2004: 720-722).

#### 3.5. Findings

Pearson's correlation coefficients between the variables and descriptive statistics of the variables that used in this study were summarized in Table 5. Ethical leadership has shown a significant and positive correlation with the intrinsic satisfaction (r=,382; P<,01) and the extrinsic satisfaction (r=,666, P < ,01) variables that were discussed as the dependent variables of this study. Level of ethical leadership had a significant and positive relationship with DED\*ATTACH (r=,628; P<,01), EFFORT (r=,240; P<,01), IDENT (r=,438; P<,01) and INTERN (r=,561; P<,01) variables which were at the same time discussed as mediator variables. When the correlations between the mediator variables and the dependent variables were analysed, it was understood that all of these coefficients were positive and significant.

<sup>&</sup>lt;sup>6</sup>The reason for using these three methods in a combination is to provide strong statistical evidences to the existence of predicted mediating relationship by testing mentioned relationship within the framework of alternative approaches. Procedure that proposed by Baron and Kenny (1986) is known as the most widely used method for testing mediation relationship (Preacher and Hayes, 2004). However, Sobel (1982) produces statistically more powerful results in terms of testing the significance of the predicted indirect effect. Sensitiveness to sample size and to the assumption of a normal distribution are the weak points of this test. If we have question marks about providing these assumptions, then bootstrapping method that is a non-parametric approach, offers an alternative assessment ability (Hayes, 2009; Preacher and Hayes, 2004).

Examination of the correlation matrix is also important for identifying the multicollinearity problem. In order to avoid the multicollinearity problem, correlation coefficients between the variables must not be higher than ,80 (Bryman & Cramer, 1997: 257; Şencan, 2005: 222). It was not seen a multicollinearity problem between the variables when it was evaluated within the framework of this assumption.

Coefficients between the Variables										
	Variables	$\overline{X}$	SD	1	2	3	4	5	6	7
	1-ETHICAL	3,63	,96	1						
	2-DED*ATTACH	3,26	,87	<i>,</i> 628 <sup>**</sup>	1					
	3-EFFORT	4,39	,64	<i>,</i> 240 <sup>**</sup>	,225**	1				
	4-IDENT.	2,90	1,07	,438 <sup>**</sup>	<i>,</i> 674 <sup>**</sup>	,213 <sup>**</sup>	1			
	5-INTERN.	3,07	,98	,561**	<i>,</i> 670 <sup>**</sup>	,242 <sup>**</sup>	<i>,</i> 623 <sup>**</sup>	1		
	6-INTRINSIC	3,57	,82	,382 <sup>**</sup>	,262**	<i>,</i> 298 <sup>**</sup>	,292 <sup>**</sup>	,324 <sup>**</sup>	1	
	7-EXTRINSIC	3,42	,91	,666 <sup>**</sup>	<i>,</i> 570 <sup>**</sup>	,209**	,407**	,509 <sup>**</sup>	,610 <sup>**</sup>	1
	* D . OF ** D . O4									

**Table 5.** Descriptive Statistics of Variables and Pearson's CorrelationCoefficients between the Variables

\* P<,05; \*\* P<,01

The findings of the mediator analysis between the dimensions of ethical leadership, intrinsic job satisfaction and loyalty to supervisor were summarized in Table 6. Coefficients that were summarized in Table 6 demonstrated that there were positive and significant correlation ( $\beta c= 326$ , P <,01) between ethical leadership and the intrinsic job satisfaction. Accordance with this finding which was compatible with our theoretical expectations, the first condition that proposed by Baron & Kenny (1986) was provided, i.e., it was seen that the overall impact between ethical leadership and intrinsic satisfaction was significant. Within this framework, hypothesis H<sub>1a</sub> was supported. The second condition that should be provided to see the mediation effect was to obtain significant relationship between ethical leadership and loyalty to supervisor dimensions. The findings demonstrated that the increase in the perception of ethical leadership caused statistically a significant increase at all dimensions DED\*ATTACH (βa=,572; P<,01), EFFORT (βa=,161; P<,01), IDENT (βa=,488; P<,01) and INTERN ( $\beta_{a=,571}$ ; P<,01) of loyalty to supervisor. In this context, hypothesis H2 was supported with all its sub dimensions. In compliance with the assumptions taken as reference, the relation between the dimensions of loyalty to supervisor and the intrinsic satisfaction should be significant in the models in which ethical leadership and loyalty to supervisor variables were considered together. When obtained coefficients analysed, it was remarked that coefficients obtained between EFFORT ( $\beta b$ =,279; P<,01), IDENT ( $\beta b$ =,118; P<,05) and INTERN ( $\beta$ b=,135; P<,05) and the intrinsic satisfaction were in the same direction and significant. However, significant correlation could not be obtained for the DED\*ATTACH (βb=,034; P>,05) dimension. The last condition that providing evidence to mediation relationship was that, in the models like ethical leadership and loyalty to supervisor variables discussed together, the coefficients of the direct effects ( $\beta c'$ ) was insignificant or smaller than the total effect ( $\beta c' < \beta c$ ). It was seen that direct effect was significant for all models given in Table 6. But the coefficients in Model-2 ( $\beta c'=,281$ ), Model-3 ( $\beta c'=,268$ ) and Model-4  $(\beta c'=,249)$  were smaller than the total effect ( $\beta c=,326$ ). According to statements that made at the research model part of the study, this condition provides evidence to presence of "partial mediation" effect.

Table 6. The Mediator Effect of Dimensions of Loyalty to Supervisor in the Relationship
between Ethical Leadership and Intrinsic Job Satisfaction

between Ethical Leadership and Intrinsic Job	Satisfact	ion					
Direct an	d Total Eff	ects					
Model-1		3	SE	t		Р	
$Y (INSTR) = \theta_{01} + \theta_{CX} (ETHICAL)$	вc=	,326	,053	6,135	,0	0000	
M (DEDATT)= $\beta_{02} + \beta a X$ (ETHICAL)	вa=	,572	,047	11,995	,C	0000	
Y (INSTR)= $\beta_{02} + \beta c' X$ (ETHICAL)+ $\beta bM$ (DEDATT)	вb=	,034	,075	,460	,e	6457	
Y (INSTR)= $\beta_{02} + \beta c' X$ (ETHICAL)+ $\beta b M$ (DEDATT)	<i>вс'=</i>	,306	,068	4,477	,0	0000	
Indirect Effect and Signif	ficance of	Normal D	Distribution				
	Value	e SE	LL 95 CI	UL 95 CI	Z	Р	
SOB	EL ,019	,043	-,064	,104	,458	,646	
BOOTSTRAP Res	ults for In	direct Eff	ect				
	Mear	I SE	LL 95 CI	UL 95 CI			
EFFE	CT ,012	,049	-,094	,101			
Direct an	d Total Eff	ects					
Model-2		3	SE	t		Р	
Y (INSTR)= $\beta_{01}$ + $\beta_{CX}$ (ETHICAL)		,326	,053	6,135	.(	000	
$M (EFFORT) = \theta_{02} + \theta_{02} (ETHICAL)$		,161	,043	3,676		003	
$Y (INSTR) = \beta_{02} + \beta c' X (ETHICAL) + \beta b M (EFFORT)$		,279	,079	3,506		0006	
Y (INSTR)= $\beta_{02} + \beta c' X$ (ETHICAL)+ $\beta bM$ (EFFORT)		,281	,053	5,265	-	0000	
Indirect Effect and Signif							
	Value		LL 95 CI	UL 95 CI	Z	Р	
SOB		,018	,009	,080,	2,48	,012	
BOOTSTRAP Res		,	-	,		1-	
	Mear		LL 95 CI	UL 95 CI			
EFFE		,019	,014	,088			
Direct an	d Total Eff	octs	· · · · · · · · · · · · · · · · · · ·				
Model-3		3	SE	t		Р	
$Y$ (INSTR)= $\beta_{01}$ + $\beta_{CX}$ (ETHICAL)		,326	,053	6,135	(	0000	
$M (IDENT) = \theta_{02} + \theta_{03} (ETHICAL)$		,488	,055	7,244		0000	
Y (INSTR) = $\beta_{02} + \beta c' X$ (ETHICAL) + $\beta bM$ (IDENT)		,118	,052	2,250	-		
$Y (INSTR) = \beta_{02} + \beta c' X (ETHICAL) + \beta bM (IDENT)$		,268	,052	4,581		,0254 ,0000	
Indirect Effect and Signif				.,			
	Value		LL 95 CI	UL 95 CI	Z	Р	
SOB		,027	,004	,111	2,130	,033	
BOOTSTRAP Res		,	,	)	2,200	,000	
	Mear		LL 95 CI	UL 95 CI			
EFFE		,028	,005	,114			
	d Total Eff		,	,			
Model-4		B	SE	t		Р	
$Y (INSTR) = \theta_{01} + \beta_{CX} (ETHICAL)$		,326	,053	6,135	r	0000	
$M (INTERN) = \theta_{02} + \theta_{0X} (ETHICAL)$		,520 ,571	,055	10,06		0000	
$Y (INSTR) = \theta_{02} + \theta c'X (ETHICAL) + \theta bM (INTERN)$		,135	,050	2,156			
$Y (INSTR) = \theta_{02} + \theta c' X (ETHICAL) + \theta b M (INTERN)$		,249	,063	3,914	,0322 ,0001		
Indirect Effect and Signif			•	5,514	,0		
	Value		LL 95 CI	UL 95 CI	z	Р	
SOB	-	,036	,005	,149	2,098	,036	
BOOTSTRAP Res				,170	2,000	,550	
	Mear		LL 95 CI	UL 95 CI			
EFFE		,037	,001	,150			
	. ,075	,057	,001	,130			

Number of Bootstrap Resamples: 5000

Sobel Test coefficients that applied to test the significance of obtained indirect effect were not significant for Model-1 (z=,458; P>,05). However, significant coefficients were obtained for Model-2 (z=2,48; P<,05), Model-3 (z=2,13; P<,05) and Model-4 (z=2,09; P<,05). The results of Bootstapping were also parallel to Sobel Test. Based on these results, except H3a dimension, all remaining dimensions of the hypothesis  $H_3$  was supported.

between Ethical Leadership and Extrinsic Job	Satisfacti	on				
Direct an	nd Total Effe	ects				
Model-1	β		SE	t		Р
$Y (EXTR) = \theta_{01} + \theta_{CX} (ETHICAL)$	вс=,	632	,047	13,27	,C	0000
$M (DEDATT) = \theta_{02} + \beta a X (ETHICAL)$	ва=,	572	,047	11,995	,C	0000
Y (EXTR)= $\beta_{02} + \beta c' X$ (ETHICAL)+ $\beta b M$ (DEDATT)	вb=,	262	,065	4,030	,C	0001
Y (EXTR)= $\beta_{02} + \beta c' X$ (ETHICAL)+ $\beta b M$ (DEDATT)	<i>вс'=</i> ,	483	,059	8,147	,0	0000
Indirect Effect and Signi	ficance of N	lormal D	istribution			
	Değer	SE	LL 95 CI	UL 95 CI	Z	Р
SOB	EL ,150	,039	,073	,227	3,808	,000
BOOTSTRAP Res	ults for Ind	irect Eff	ect			
	Mean	SE	LL 95 CI	UL 95 CI		
EFFE	140, CT	,047	,039	,228		
Direct an	d Total Effe	octs				
Model-2	β		SE	t		Р
Y (EXTR) = $\beta_{01}$ + $\beta_{CX}$ (ETHICAL)	<u>β</u> βc=,0		,047	13,27	r	0000
$M (EFFORT) = \theta_{02} + \theta_{0X} (ETHICAL)$	ва=,		,047	3,676	,	0003
$Y (EXTR) = \theta_{02} + \theta c' X (ETHICAL) + \theta b M (EFFORT)$	вb=,		,043 ,073	1,007	-	8149
$Y (EXTR) = \theta_{02} + \theta c' X (ETHICAL) + \theta b M (EFFORT)$	βc'=,		,049	12,642		0000
Indirect Effect and Signif	,		,	12,042	,c	,000
	Değer	SE	LL 95 CI	UL 95 CI	z	Р
SOB		.013	-,013	,036	.939	,347
BOOTSTRAP Res	7=	,		,050	,555	,547
bootsmarkes	Mean	SE	LL 95 CI	UL 95 CI		
EFFE		,012	-,013	,037		
	,	,	-,013	,037		
	nd Total Effe		65			
Model-3	β		SE	t		P
$Y (EXTR) = \theta_{01} + \theta_{CX} (ETHICAL)$	вс=,		,047	13,27		0000
$M (IDENT) = \theta_{02} + \theta_{03} (ETHICAL)$	ва=,-		,067	7,244	-	0000
$Y (EXTR) = \theta_{02} + \theta c' X (ETHICAL) + \theta b M (IDENT)$	вb=,		,047	2,597	-	)100
$Y (EXTR) = \theta_{02} + \theta c' X (ETHICAL) + \theta b M (IDENT)$	<u>вс'=,</u>		,052	10,946	ا,	0000
Indirect Effect and Signi					-	
	Value	SE	LL 95 CI	UL 95 CI	Z	P
SOB	/	,025	,011	,107	2,424	,015
BOOTSTRAP Res						
	Mean	SE	LL 95 CI	UL 95 CI		
EFFE	CT ,055	,028	-000	,110		
Direct an	nd Total Effe	ects				
Model-4	β		SE	t		Р
$Y (EXTR) = \theta_{01} + \beta_{CX} (ETHICAL)$	вc=,	632	,047	13,27	,C	0000
$M (INTERN) = \theta_{02} + \theta a X (ETHICAL)$	ва=,	571	,056	10,06	,0	0000
Y (EXTR)= $\beta_{02} + \beta c' X$ (ETHICAL)+ $\beta bM$ (INTERN)	вb=,	184	,055	3,330	,0	010
Y (EXTR)= $\beta_{02} + \beta c' X$ (ETHICAL)+ $\beta bM$ (INTERN)	вс'=,	527	,056	9,371	,0	0000
Indirect Effect and Signit	ficance of N	lormal D	istribution			
-	Value	SE	LL 95 CI	UL 95 CI	Z	Р
SOB	EL ,105	,033	,039	,170	3,147	,001
BOOTSTRAP Res	ults for Ind	irect Eff	ect			
	Mean	SE	LL 95 CI	UL 95 CI		
EFFE	ст ,099	,039	,022	,178		
	,	,		, -		

**Table 7.** The Mediator Effect of Dimensions of Loyalty to Supervisor in the Relationship

 between Ethical Leadership and Extrinsic Job Satisfaction

Number of Bootstrap Resamples: 5000

Mediator analysis findings among the dimensions of ethical leadership, extrinsic job satisfaction and loyalty to supervisor were summarized in Table 7. Analysis results confirmed a significant and positive relationship between the level of ethical leadership and extrinsic satisfaction ( $\beta$ c=,632; P<,01). In the light of this finding, hypothesis H<sub>1b</sub> was supported. When we examined the effects of dimensions of loyalty to supervisor on extrinsic satisfaction, it was seen that for all dimensions except the EFFORT dimension ( $\beta$ b=,074; P>,05), a significant and positive relationship was obtained (DED\*ATTACH:  $\beta$ b=,262; P<01; IDENT:  $\beta$ b=,122; P<01; INTERN:  $\beta$ b=,184; P<01). While the coefficients in Model-1 ( $\beta$ c'=,483), Model-3 ( $\beta$ c'=,573) and

Model-4 ( $\beta c'=,527$ ) were smaller than the total effect ( $\beta c =, 632$ ), the coefficients of direct effects between ethical leadership and extrinsic satisfaction were significant for all models (P <, 01). While evaluated together with the results of Sobel Test, the indirect effects for Model-1 (z=3,80; P<,01), Model-3 (z=2,42; P<,05), and Model-4 (z=3,14; P<,01) were significant, but a significant indirect effect was not obtained for Model-2 (z=,939; P>,05). The results of Bootstrapping were more like to confirm these findings. In the light of these findings, with all remaining sub-dimensions except H<sub>4b</sub> dimension, hypothesis H<sub>4</sub> was supported.

## 4. Results and Discussion

We confirmed that ethical leadership has an effect on job satisfaction with our research model. Our main purpose and what we are trying to put forward is to understand and explain how or over which variables this relationship that has been existed in the literature is came out. At the same time, findings of our analysis have confirmed that ethical leadership is effective on loyalty to supervisor and also loyalty to supervisor increases employees' job satisfaction. These two relationships, as mentioned above have implied that loyalty to supervisor could be a mediating variable that mediate to relationship between ethical leadership and job satisfaction. As a result of the mediator analysis that we made for testing this model, we have confirmed that a certain part of the relationship between ethical leadership and job satisfaction has come out over loyalty to supervisor.

But it took attention that this relationship differentiated at a certain level on the intrinsic and extrinsic dimensions. From the intrinsic dimension side of job satisfaction, indirect effect has been defined over Effort, Identification and Internalization dimensions of loyalty to supervisor.

On the other hand, it has revealed that Ded\*Attach dimension of the loyalty to supervisor variable has no significant effect on intrinsic dimension of job satisfaction. At the same time, indirect effect has not revealed because of this situation.

And on the extrinsic dimension side of job satisfaction, while Ded\*Attach, Identification and Internalization dimensions of loyalty to supervisor variable have mediated the relationship between ethical leadership and job satisfaction, a significant indirect relationship could not be obtained for Effort dimension of loyalty to supervisor. Because of the reason of this situation, the relationship between Effort dimension and extrinsic dimension of job satisfaction is not statistically significant.

If these relations that arose out of various forms for intrinsic and extrinsic dimensions of job satisfaction evaluated within the framework of main features of the Turkish culture, then they could become more understandable and meaningful. Because Turkish culture is a collectivist culture (Hofstede, 1980), it has observed in collectivist cultures that employer-employee relations have been based on moral grounds. In return for the relationship such as loyalty and commitment to supervisor likewise relations in a family it is expected that employees have been protected by supervisor. Just as parents do not give up their children, similarly, lower performance of the employees also shall not be considered as the reason for dismissal. However, the performance and skills are effective for an employee to determine for which work he/she will be assigned (Hofstede, 1991: 64–66; Hofstede & Hofstede, 2005: 99–101; Hofstede et al, 2010: 120).

Hence, as a feature of Turkish culture, employees hope to be protected and looked after by supervisor in return of loyalty to him/her. If it is evaluated within the framework of this relationship, in the face of ethical behaviour of supervisor Employees who feed dedication and attachment to their supervisor, in return for this commitment will be reached to their objectives such as payment and status that taking part among the factors of extrinsic dimension and also that the supervisor can offer them. At the same time, it has seen that identification with supervisor and internalization of supervisor's values are also important for obtaining of these gains that providing extrinsic satisfaction.

The Effort dimension of loyalty to supervisor has stated that the employee is a volunteer to demonstrate higher performance for the supervisor. Whereas defined above, within the framework of characteristics of a collectivist culture, this effort is not a necessary condition in terms of accessing outputs that providing extrinsic satisfaction.

It is found enough for an employee to internalize supervisor's ethical values and in a way to identify with them for obtaining extrinsic gains. Another contextual feature is "external locus of control" that supporting our opinions. Turkish people have been considerably under the influence of the Islamic tradition. Therefore, they have admitted that positive or negative events that they can meet have occurred beyond their control as an important feature of this tradition (Wasti, 1998: 622). Hence, individuals have thought that they could obtain extrinsic gains not with the help of their personal effort but depending on other external factors. It is understood that while Effort dimension has a significant effect on intrinsic dimension of job satisfaction, Ded\*Attach dimension has not.

Factors such as achievement, recognition, growth etc. that providing the intrinsic satisfaction could be emerged as a result of extra effort that has been performed by the employee for his/her supervisor. This situation has become more meaningful for our sample. Academic staff that showing extra effort due to loyalty to supervisor, in conversion, contributes to his/her own internal development and satisfaction. On the other hand, dedication and attachment (Ded\*Attach) to supervisor and its values are directly related to such an intrinsic growth and satisfaction.

The notable another point is that Identification and Internalization dimensions of loyalty to supervisor have provided close indirect effects for both intrinsic and extrinsic satisfaction. When supervisor's ethical values is in question, employees who have shared these values have been sure with the ethic results of their work and the idea of making the right thing provides satisfaction to them in both intrinsic and extrinsic dimensions. Along with the findings that have produced noticeable results from both managerial and scientific perspectives, it would be useful to consider various constraints of study in the evaluation of results.

# 5. Recommendations for Future Studies

Many results of this study had been affected by cultural variables that exclusive to the context of Turkey. In this context, instead of accepting culture as a background, it would be useful directly inclusion of cultural variables in to the model. In accordance with the constraints of the study, the sample and the sampling area of this study was limited. Future studies can be made as intercultural comparisons with wider and extensive samples. It would allow to be made more and detailed reviews relevant with this subject.

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