Research Article / Araştırma Makalesi

The Effect of Interactional Justice on Work Engagement through Conscientiousness for Work

İşe İlişkin Sorumluluk Bağlamında Etkileşim Adaletinin İşe Bağlanmaya Etkisi

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ABSTRACT

This research examines the direct and indirect effects of interactional justice perception of employees in the manufacturing sector on their levels of work engagement. The research adopted the view of social exchange theory and tried to determine whether interactional justice affects work engagement through conscientiousness for work. Social exchange is an approach that suggests that employees feel obliged to pay for resources if the organization provides valuable resources to the employee. In the study, which considers the perspective of social change, it was thought that if managers in the organization exhibit fairly behavior toward the employees, the latter will respond with conscientiousness for work and exhibit work engagement behavior. In addition, the conscientiousness (mediator) was considered to be a job-related situation rather than a general personality trait. The data were obtained from 156 employees at a manufacturing firm operating in Turkey. In the study, exploratory and confirmatory factor analysis, correlation analysis, path analysis and structural equation modeling analysis were conducted. In the analyses, it was observed that the perception of interactional justice positively affects both conscientiousness for work and work engagement. The findings of the analysis also show that the effect of interactional justice on work engagement is partially mediated by conscientiousness for work. All findings are discussed from the perspective of the cultural context in Turkey.
Anahtar Kelimeler: Interactional justice, conscientiousness for work, work engagement, manufacturing sector

ÖZ

Bu araştırmanın amacı imalat sektörü çalışanlarının etkileşim adaleti algısının işe bağlanma düzeylerine doğrudan ve dolaylı etkilerini belirlemektir. Bu doğrultuda etkileşim adaletinin işe ilişkin sorumluluk

yoluyla işe bağlanmayı etkileyip etkilemediği sosyal değişim teorisi bakış açısıyla incelenmiştir. Sosyal değişim örgütün çalışanlara değerli kaynaklar sağlamasıyla çalışanların da bu kaynakların karşılığını verme yükümlülüğü hissettiğini öne süren bir yaklaşımdır. Araştırmada sosyal değişim bakış açısı dikkate alınarak örgüt yöneticilerinin çalışanlara adaletli davranışlar sergilemesi davranışına, çalışanların işe ilişkin sorumluluk ve işe bağlanma davranışıyla karşılık vereceği düşünülmüş ve bu doğrultuda araştırma hipotezleri oluşturulmuştur. Bunun yanında, araştırma sorumluluk değişkenini (aracı değişken) genel bir kişilik özelliği olarak değerlendirmemiş; işle ilgili bir durum olarak ele almıştır. Araştırma verileri Türkiye'de faaliyet gösteren bir imalat işletmesindeki 156 çalışandan anket tekniği ile elde edilmiştir. Araştırmada açıklayıcı ve doğrulayıcı faktör analizleri, korelasyon analizi, yol analizi ve yapısal eşitlik modellemesi analizi kullanılmıştır. Analizlerde etkileşim adaleti algısının hem işe ilişkin sorumluluğu hem de işe bağlanmayı pozitif yönde etkilediği belirlenmiştir. Analiz bulguları işe ilişkin sorumluluk duygusunun artmasıyla işe bağlanmanın da arttığını göstermiştir. Ayrıca bulgulardan etkileşim adaletinin işe bağlanmaya etkisinde işe ilişkin sorumluluğun kısmi aracı rol üstlendiği tespit edilmiştir. Elde edilen bulgular Türkiye'deki kültürel bağlam dikkate alınarak tartışılmıştır.

Keywords: Etkileşim adaleti, işe ilişkin sorumluluk, işe bağlanma, imalat sektörü

1. Introduction

The concept of work engagement, first conceptualized in Kahn's (1990) study, has been a topic of interest both in the academic and the business world in recent years. Work engagement is defined as a positive and satisfying mental state of work involving the components of dedication, vigor and absorption (Schaufeli, & Bakker, 2004) and the emergence of this positive and satisfactory state facilitates reaching organizational goals and maintaining life. The reason for this is that increased work engagement diminishes deviant behavior in the organization (Khattak, et al., 2017) and increases organizational citizenship behavior (Choo, 2016). As a result, the increase in work engagement also leads to an increase in job performance (Breevaart, et al., 2015).

There are many factors (antecedents) affecting the employee's work engagement. Organizational support (Rich et al., 2010), supervisor support (Ramos et al., 2016), leadership style (Alok, & Israel, 2012; Enwereuzor, et al., 2018), autonomy (Vera, et al., 2016), emotional state (Kane-Frieder et al., 2014), optimism and self-efficacy (Bakker, & Demerouti, 2008) are the antecedents that determine the level of employee' work engagement. Another antecedent of work engagement is the perception of organizational justice (Lyu, 2016). In this research, which deals with work engagement, the idea that the perception of justice can be the predecessor (antecedent) to work engagement is dealt with. The study also focuses on the perception of interactional justice. Considering the fact that work engagement is an important factor in the reduction of occupational accidents (Harter, et al., 2002; Robbins, & Judge, 2013), it can be said that this research would fill an important gap in the literature since it evaluates both the concept of work engagement in the manufacturing sector and the mechanism required for the increase of work engagement in the context of conscientiousness for work.

In this study, because one of the sectors with the highest number of occupational accidents is the metal sector (ie manufacturing sector) (Erginel, & Toptancı, 2017), we have focused on the concept of work engagement. The questions "Can the level of work engagement of employees in the manufacturing sector be increased by the perception of interactional justice?", "If it can be increased, how does interactional justice increase the level of work engagement?" were attempted to be answered. The research aims to contribute to the literature in a few aspects. Firstly, the research focuses on the concept of work engagement as an important determinant of work performance in organizations (Breevaart, et al., 2015) thus, determining organizational life and success- and deals with two variables (interactional justice and conscientiousness for work) that directly and indirectly affect the work engagement. Turkey representing a high-power distance and collectivist culture (Hofstede, 1980), is among the countries with low work engagement (Schaufeli, 2018). For such countries including Turkey, the identification of organizational variables strengthening the work engagement of employees is important for increasing business performance and therefore, for the continuation of organizational life. For these reasons, this research explores how work engagement can be strengthened by the perception of interactional justice. Although research in the literature has examined the impact of organizational justice on work engagement (Lyu, 2016; Park, et al., 2016), no research has been found suggesting that conscientiousness for work can play a mediating role in the effect of interactional justice on work engagement. The reason for the fact that conscientiousness for work is considered as a mediator variable rather than a moderator is that the perception of interactional justice increases the conscientiousness behavior (Alkailani, & Aleassa, 2017; Garg, et al. 2013), and the conscientiousness increases work engagement (Akhtar, et al., 2015; Scheepers, et al., 2016). The reason why researches do not focus on organizational justice as a whole but rather focus on interactional justice is that the distributional

justice and procedural justice are largely dependent on high-level organizational policies and procedures (He, et al., 2017), whereas interactional justice is related to the persons in the managerial position and their behavior (Cohen-Charash, & Spector, 2001). Secondly, conscientiousness in the research is treated as a feeling of work, not as a personality in the general sense, and the effect of conscientiousness for work on work engagement is examined. Therefore, it is considered that the research is original, both by considering conscientiousness as a work-related emotion and by trying to determine the effect of interactional justice on work engagement through conscientiousness for work.

2. Theoretical Framework and Research Hypotheses
2.1. Interactional Justice
Organizational justice is defined as the reflection of justice in the general sense on the workplace, and the perception of this reflection by the employee (Yildiz, 2014), namely, the perception that employees are treated fairly in their work (Moorman, 1991). In an organization where justice is perceived, fair and ethical practices and procedures are dominated and encouraged within the organization (Iscan, & Naktiyok, 2004). In such an organization, individuals observe whether they are being treated fairly and develop an attitude towards organization in this direction (Greenberg, 1990).

In organizational settings, justice is usually treated as (a) the fairness of output distribution and (b) fairness of procedures used for determining the output distribution. These forms of justice are the distributional justice and procedural justice (Colquitt et al., 2001). Distributional justice is based on Adams' (1965) equity theory (Choi, et al., 2013; Mao, et al., 2016) and concerns the perceived justice for the allocation of resources by the organization and the distribution of outputs (Ribeiro, & Semedo, 2014). Procedural justice is the fairness of the processes related to the outputs, i.e, the extent to which employees perceive the rules and procedures in this process (Dahanayake, et al., 2018). Therefore, while distributional justice is justice perception related to output, procedural justice is concerned with the processes of distributing outputs, not outputs. In organizations, there is a third type of justice for the level of fairness of inter-individual relations and behaviors as well as the output distribution and the process of output distribution. This type of justice is "interactional justice"- which is the focus of this research.

Interactional justice, in its focus on whether people in the decision-making position are fair in their behavior (Bies, & Moag, 1986; He, et al., 2017), is concerned with how one behaves to others. Interactional justice is an extension of procedural justice and focuses on the human orientation of organizational practices, namely, the way the management is behaving toward the recipient of justice (Cohen-Charash, & Spector, 2001). Interactional justice, therefore, focuses on the interpersonal aspects of organizational practices, in particular, on the interpersonal behavior and communication of managers to employees (Ribeiro, & Semedo, 2014).

Interactional justice arises in two ways, namely, informational and interpersonal justices (Cropanzano et al., 2007; Colquitt, et al., 2001; Fujimoto, & Azmat, 2014; Collins, & Mossholder, 2017). While interpersonal justice requires that decision-makers are sensitive to their subordinates and respectful of their interaction with them, informational justice is the behavior of decision-makers to inform employees about processes and decisions. Therefore, giving employees the necessary information about organizational processes and decisions, and being polite and respectful in interacting with employees leads to the expectation to ensure the perception of interactional justice.

Interaction justice arises when the behavior of the supervisor is evaluated fairly by the employees during the interaction (Gurbuz, & Mert, 2009). The perception that supervisors and deci-

sion-makers are unfair in their interaction is the determinant of negative/unfavorable attitude and behavior of the employee. The increase in justice perception related to interaction not only increases well-being (Celik, et al., 2014) and positive affectivity (Polatci, & Ozcalik, 2015), but also, organizational commitment (Cagliyan, et al., 2017; Nakra, 2014), organizational citizenship behavior (Collins, & Mossholder, 2017) and organizational trust (Rajabi, et al., 2017) are strengthened whilst counterproductive work behavior (Polatci, & Ozcalik, 2015) and turnover intention (Ribeiro, & Semedo, 2014) are reduced. Another possible positive outcome of the perception of interactional justice is the increased conscientiousness for work. The concept of conscientiousness for work is explained below.

2.2. The Relation between Interactional Justice and Conscientiousness for Work

Conscientiousness, one of the five-factor personality traits (Goldberg, 1992), refers to the degree to which an individual is regular, systematic, punctual, and success-oriented (Jain, & Ansari 2018). Conscientiousness, which also refers to have self-discipline (Cetin, et al., 2015) is defined as the tendency to exhibit self-discipline and have a sense of accomplishment over expectations (Kozako, et al., 2013). Reliability, diligence and efficacy are the key components of conscientiousness, and individuals with these characteristics tend to be more hard-working, success-oriented and enthusiastic (Ciavarella, et al., 2004). According to Costa Jr et al. (1991), individuals with a conscientious personality have competency, order, dutifulness, success striving, precaution and self-discipline. Competency means that the individual is talented, sensible and successful; order is that the individual has the tendency to keep the environment regularly and well organized. While dutifulness expresses strict adherence to the standards of conduct, the characteristic of striving for success is to work for perfection. While self-discipline is described as the ability to continue with a task despite boring and distracting stimuli; deliberation is to plan and think and to be careful.

In the light of the explanations and definitions above, it can be said that conscientiousness is related to the level of organizing and managing the impulse of the individuals in general terms. The conscientiousness examined in this research is not the person's overall conscientiousness but the level of conscientiousness in his work. This concept, expressed as "conscientiousness for work", is defined as being a regular, striving to be successful, and acting with consciousness of duty in the individual's work. Individuals with conscientiousness for work are individuals who are prepared for work requirements, are planned and programmed in their work, and regularly perform tasks without delay.

In the literature, it is seen that the studies that directly examine the relationship between justice and conscientiousness are quite limited (Lv, et al., 2012), and there are no studies investigating the relationship between interactional justice and conscientiousness directly. In this study examining the relationship between justice and conscientiousness (Lv, et al., 2012), it has been suggested that the character of conscientiousness positively effects organizational justice. In this research, on the contrary, it is thought that organizational justice (interactional justice) will affect conscientiousness (conscientiousness for work). The relationship between interactional justice and conscientiousness for work can be explained in the context of social exchange theory (Blau, 1964). The social exchange theory is an approach suggesting that there is a mutual benefit obligation in the relations between the employee and the organization. In a more precise expression, positive behaviors and benefits provided to the employees by the organization will be responded to through the positive behavior of the employees. When considered in the context of interaction-

al justice, if managers and decision makers in the organization exhibit appropriate and fair behavior towards the employees, the latter will exhibit useful behavior towards the organization as a demonstration of goodwill (Colquitt, et al., 2001; Cohen-Charash, & Spector, 2001). In line with the perspective of social exchange theory, it is also thought that the perception of interactional justice will increase the conscientiousness for work in this research. That is, if the individuals in the decision-making position are respected and gentle in interacting and communicating with the employees and give them the necessary information about the decisions taken, the employees will also be conscientiousness in their work; they will be prepared for their work and will work on a regular basis without delay. In other words, the perception of interactional justice is expected to strengthen the sense of conscientiousness for work. Although there is no research which directly examines the relationship between interactional justice and conscientiousness for work, there are studies showing the possibility of a positive relationship between interactional justice and conscientiousness personality traits (Fu, & Lihua, 2012; Ozafsarlioglu Sakalli, 2015). In addition to these studies, there are also studies suggesting that justice is related to conscientiousness which is a citizenship behavior. According to one of these studies (Alkailani, & Aleassa, 2017), the perception of justice positively affects employees' conscientiousness behavior. In another study (Garg, et al. 2013), it was found that interactional justice increases conscientiousness behaviors. Finally, Yaghoubi et al. (2012), in their studies, argued that interactional justice promotes conscientiousness behavior. Therefore, in each study, it is suggested that perceived justice is an important determinant of conscientiousness behavior.

In line with the above explanation and expectation, it has been considered that the employee's perception of interactional justice will increase the sense of conscientiousness for work, and thus the following research hypothesis has been developed:

> *H1: Interactional justice perception positively affects conscientiousness for work; that is, increasing the perception of interactional justice increases the level of conscientiousness for work or vice versa.*

2.3. The Relation between Interactional Justice and Work Engagement

The concept of "engagement" can be dealt with in two perspectives: employee engagement and work engagement. Employee engagement arises towards the organization that the individual is member of it, whereas work engagement occurs towards the work that the individual does (Schaufeli, & Bakker, 2010). This research considers "engagement" as a work-oriented situation and defines it in terms of the members of the organization being willing to do the work they are obliged to do and give all their attention and energy to work.

Work engagement is an individual's investment in personal resources at work (Christian, et al., 2011), that is, it is a situation in which an individual uses physical, emotional and cognitive energy while performing his job roles (Rich, et al., 2010) and establishes a strong connection with his work (Christian, et al., 2011). In a situation where work engagement occurs, the employees are happy, doing their work, and fulfilling their work obligations enthusiastically. In addition, an employee engaged in work makes more effort physically and emotionally and gives all attention to work.

It is also possible to describe the work engagement as a positive and satisfying mental state of work consisting of dedication, vigor and absorption components (Schaufeli, et al., 2002). Vigor, even if obstacles are found, is that the employee is energized, persevering and willing to work at

a high level (Gupta, & Shaheen, 2017). Dedication is about the employee's care about his work and pride in his work (Schaufeli, et al., 2006; Vera, et al., 2016). Absorption means that the employee is fully focused on his work and is doing his work happily (Vera, et al., 2016) so that there is a feeling of passing the time quickly (Gupta, & Shaheen, 2017).

The relationship between interactional justice and work engagement can be explained in terms of the social exchange theory. In the context of social exchange theory, if managers in the organization are fair to employees and are respectful and polite in their communication with them, employees will have an obligation to show positive attitudes and behavior towards the organization (Colquitt, et al., 2001; Cohen-Charash, & Spector, 2001), thus the level of employees' work engagement will increase. In the research conducted on employees of bank by Ghosh et al. (2014) and of manufacturing and pharmaceutical sector by Agarwal (2014), it was observed that interactional justice had a positive influence on work engagement. It was seen that in the researches carried out by Akşit Aşık (2016) and Ozer et al. (2017), the perception of interactional justice was strengthened by the level of work engagement. Inoue et al. (2010) determined that the level of work engagement increased with the rise in perception of interactional justice. In addition to these studies that deal with the relationship between interactional justice and work engagement, some studies suggested that other dimensions of justice (distributive and procedural) have a positive effect on work engagement (Karatepe, 2011; He, et al., 2014; Saks, 2006; Strom, et al. 2014). In addition, it was suggested in many types of research that organizational justice perception was an important determinant of work engagement (Lyu, 2016; Park, et al., 2016; Zhu, et al., 2015).

Considering the above explanations and research findings, the following hypothesis is developed:

> *H2: Interactional justice perception affects work engagement positively; that is, increasing the perception of interactional justice increases the level of work engagement or vice versa.*

2.4. The Relation between Conscientiousness for Work and Work Engagement

As stated before, conscientiousness is the tendency to show self-discipline, to act with duty consciousness (Akanni, & Oduaran, 2017) and to be success-oriented and diligent (Ciavarella, et al., 2004). Conscientious individuals spend more energy on their work due to having a high achievement-striving motivation (Kim, et al., 2009). In addition, since individuals with high conscientiousness have self-discipline (Zaidi, et al., 2013), they focus more on completing and fulfilling their task than the awards they may receive on duty (Jain, and Ansari, 2018). Consequently, conscientiousness can influence work engagement through the internal motivational process (Kim, et al., 2009). In other words, individuals with high conscientiousness are internally motivated, have high success orientations and give their energy to work (Akhtar, et al., 2015). Therefore, it is possible that these individuals have high levels of engagement to work. Indeed, the related literature has typically obtained findings supporting this situation. For examples, the research conducted by Mroz and Kaleta (2016) on service sector employees and by Akhtar et al. (2015) on different sector employees indicated that conscientiousness had a positive effect on work engagement. According to Scheepers et al. (2016), conscientiousness increased the level of work engagement of teachers and doctors. Kim et al. (2009) Mostert and Rothmann (2006), Bakker et al. (2012) and Zecca et al. (2015) also obtained similar findings.

In the light of the explanations above and the research findings in this study, it was thought that the individual's conscientiousness for work would be more engaged to their work and the following research hypothesis was developed:

H3: Conscientiousness for work affects work engagement positively; that is, increasing the conscientiousness for work increases the level of work engagement or vice versa.

2.5. The Mediating Role of Conscientiousness for Work

As stated above in the perspective of social exchange theory (Blau, 1964), if managers are fair in interacting and communicating with employees, they become well prepared, regular and achievement-oriented in their work , and as a result, the interactional justice perception may increase the level of conscientiousness for work. On the other hand, the perception that employees are fair in their interaction with managers also strengthens their work engagement (Agarwal, 2014; Akşit Aşık, 2016) and an increased level of conscientiousness also increases the level of work engagement (Mroz, & Kaleta, 2016; Scheepers, et al., 2016). Therefore, it can be said that conscientiousness for work can play a mediating role on the effect of interactional justice on work engagement. In other words, interactional justice may be expected to affect work engagement through conscientiousness for work. In the literature, there is no research found to support the idea interactional justice affects work engagement through conscientiousness for work. However, in a study (Walumbwa, et al., 2012), it was determined that group conscientiousness plays a mediating role in the relationship between ethical leadership and group performance. In this direction, the following hypothesis has been developed:

H4: Conscientiousness for work plays a mediating role on the effect of interactional justice on work engagement; that is, interactional justice perception effects work engagement through conscientiousness for work.

In accordance with these hypotheses, the following research model (Figure 1) was established and the acceptance/rejection decision of the hypotheses is given with reference to this model.
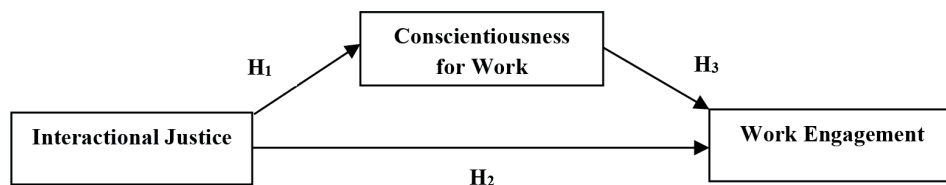

Figure 1: Research Model

3. Method
3.1. The Aim and Sample of Research

The aim of this research is to reveal the effect of the perception of interactional justice on the level of conscientiousness for work and work engagement. In addition, the mediating role of the level of conscientiousness for work in the effect of the interactional justice perception related work engagement was also examined. The mediating effect, a method which shows that the relationship between two variables, is realized by the intervention of a third variable (Baron & Kenny, 1986). In the study, in a situation where justice is perceived, the level of work engagement is strengthened; however, this situation is thought to be mainly due to the increase in the level of conscientiousness for work and the mediation effect is attempted to be determined ac-

cordingly. In line with these objectives, the employees of a manufacturing firm (screw manufacturing) operating in the province of Adana were identified as the universe. It was observed that the sample size to be chosen with a 95% confidence level and a 5% error margin should be 142 (http://www.surveysystem.com/sscalc.htm). The research data were obtained by simple random sampling and questionnaire technique. 170 of 200 distributed questionnaires were returned from the business managers but only 156 questionnaires were able to be evaluated because of the data loss in 14 questionnaires. The questionnaires taken into consideration were examined and it was determined that the majority of the participating employees were male (72.4%) and married (63.5%). In terms of the age variable, the employees under 25 years old were the least (9.6%), while those aged 26-30 years were the highest (%59.6). The majority of the participating employees were found to have high school or below education level (59.6%); in terms of years of work, it was seen that the ratio of the individuals working between 0-5 years in the business is the highest (50.6%).

3.2. Scales Used in Research

The organizational justice scale developed by Niehoff and Moorman (1993) was used to measure employees' interactional justice perception. The organizational justice scale consists of three (3) dimensions, namely, distributional, procedural and interactional justice in the original work. In this study, only the dimensions of interactional justice (9 items) were taken into consideration. Some of the items in the scale are "Regarding decisions made about my job, my manager debates the consequences of the decisions with me" and "When making decisions about my job, my manager treats me kindly and considerably". Scale items were prepared with a 5-point Likert type (1 = strongly disagree; 2 = disagree; 3 = don't know; 4 = agree; 5 = strongly agree). In the study, the Cronbach alpha coefficient was 0.951 in reliability analysis and hence it can be claimed that the scale used is quite reliable.

A 10-question conscientiousness scale developed by Goldberg (1992) was used to determine the employee's level of conscientiousness for work, and scale items were designed to determine the level of conscientiousness for the work of employees. Some of the items in the scale are "When I get out of the bed in the morning, I feel like going to job/work" and "When I work hard, I feel happy". Scale items were prepared with a 5-point Likert type (1 = strongly disagree, 5 = strongly agree). In the reliability analysis, the scale (cronbach alpha 0.857) was found to be reliable.

The Utrecht Work Engagement Scale (UWES), developed by Schaufeli et al. (2002) and then shortened by Schaufeli et al. (2006), was used to determine the level of work engagement to employees. The scale originally consists of three dimensions (dedication, vigor and absorption) and nine items. Some of the items in the scale are "When I get out of the bed in the morning, I feel like going to job/work" and "When I work hard, I feel happy". Reliability analysis indicated a highly reliable results (Cronbach alpha 0,973). Scale items were prepared with a 5-point Likert type (1 = Almost None; 2 = Rarely; 3 = Sometimes; 4 = Frequent; 5 = Very Frequent). In addition, all items in the scales were translated from English to Turkish and the participants responded to the items in Turkish.

4. Findings

4.1. Factor Analysis Findings Related to Scales

The factor structure of the scales used in the study was determined by exploratory and confirmatory factor analyzes, respectively. In the explanatory factor analysis, it was taken as a reference

that the KMO (Kaiser-Meyer-Olkin) value is greater than 0.60 and Barlett's Sphericity Test value is <0,05. On the other hand, items with a factor load of less than 0.40 were excluded from the analysis.

In the exploratory factor analysis of the interactional justice scale, it was seen that the scale was a one-factor structure and provided the necessary reference values (KMO=0,922; Barlett test= 0,000). The item factor loads of the scale were between 0,783 and 0,930. Confirmatory factor analysis was performed after the exploratory factor analysis. In the analysis, modifications were made between some items to improve the model fit index values and it was seen that the one-factor structure was confirmed. The model fit index values of the scale are given in Table 1.

In the exploratory factor analysis on the conscientiousness for work scale, which was another variable of the research, the factor load of two (2) items was subtracted from the analysis because of the values below 0.40. A one-factor structure was obtained in the analysis of the remaining items and the reference criteria were provided (KMO=0,842; Barlett test= 0,000). The item factor loadings of the scale were found to be between 0.658 - 0.792. Confirmatory factor analysis was performed to test the obtained factor structure and the fit index values were improved by modifying. The fit index values obtained after modification are presented in Table 1.

Finally, in the exploratory factor analysis of work engagement, the scale items were collected under a single factor and reference criteria for the scale were provided (KMO = 0.936, Barlett test = 0.000, factor loads = between 0.838-0.952). The resulting factor structure was tested by confirmatory factor analysis and removed from the analysis because the factor load of one item (1) in the analysis did not meet the reference criterion. On the other hand, the fit index values were improved by modifying between the items, and the obtained index values are given in Table 1.

Table 1: The Fit Index Results

Indexes	Reference Value	Interactional Justice	Conscientiousness for Work	Work Engagement	Research Model	Model without Mediating Variable
CMIN/DF	$0<\chi2/sd\leq 5$	1,743	1,947	1,843	1,383	1,419
RMR	$\leq,10$	,004	,024	,010	,025	,015
CFI	$\geq,90$	,989	,972	,994	,975	,986
IFI	$\geq,90$	,989	,972	,994	,975	,987
TLI	$\geq,90$	,981	,951	,987	,970	,982
RMSEA	$<,05-,08\leq$	,069	,078	,074	,050	,052

In order to minimize the common method bias in the research, it was stated that the answers to the sample employees would be kept completely confidential. In addition, the single factor test proposal of Harman was taken into account for common method bias. Non-cyclic factor analysis was conducted to all items in interactional justice, conscientiousness for work and work engagement scales. In the analysis, three (3) factors with eigenvalues higher than 1 were obtained and the first factor explained a significant level (%39,440) of total variance. Therefore, it was found that there was no common method bias (Podsakoff, et al., 2003).

4.2. Tests of the Hypotheses
Before testing hypotheses in the research, correlation analysis was used to determine the direction and strength of relationships between the variables of interactional justice, conscientiousness

for work, and work engagement. Control variables (gender, marital status, age, educational status, tenure) were included in the correlation analysis. The obtained results are presented in Table 2.

Table 2: Relations among Variables

Variables	$\overline{X}$	SS	1	2	3	4	5	6	7	8
1- Gender	1,276	,448	1							
2- Marital Status	1,365	,483	-,021	1						
3- Age	2,212	,601	-,050	-,534**	1					
4- Educational Status	1,545	,773	,215**	,172*	-,125	1				
5- Tenure	1,840	,686	-,338**	-,367**	,474**	,020	1			
6- Interactional Justice	3,924	,381	,094	-,179*	,124	,154	,043	1		
7- Conscientiousness for Work	4,230	,393	-,120	-,033	,059	,342**	,123	,281**	1	
8- Work Engagement	4,213	,753	-,099	-,023	,094	,023	,026	,339**	,307**	1

When the relationships between the variables in the Table 2 are examined, a positive and significant relationship between interactional justice perception and conscientiousness for work (r = ,281**) and between interactional justice perception and work engagement (r = ,339**) were found. Findings also indicate that conscientiousness for work is also positively related to work engagement (r = ,307**).

Research hypotheses were tested after examining the strength and direction of the relationship between variables. Structural equality modeling was done with the AMOS program for the testing of the developed hypotheses. However, before the analysis of structural equality modeling, it was first determined whether there was a problem of multicollinearity between variables. The VIF (variance inflation factor) values and the tolerance index values of the variables (interactional justice and conscientiousness for work) were examined in order to determine this problem. It was observed that the VIF values were below 10 and the tolerance indices were over 0,10. For this reason, it was identified that structural equality modeling analysis can be performed. In the analysis of structural equality modeling, it was observed that the goodness of fit index values of the research model were acceptable (see, Table 1). The estimation results obtained for the model are presented in Figure 2.
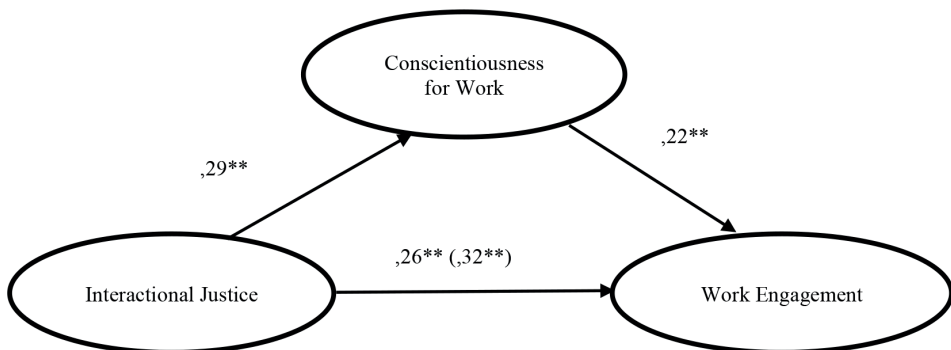

Figure 2: Estimation Results of the Research Model

The findings of the structural equality analysis used to test the research hypotheses are given in Table 3.

Table 3: Findings Related to the Test of Hypotheses in the Research Model

Hypotheses	Predicted Variable		Predictor Variable	Standardized Estimate	S.E.	C.R.	p
H1	Conscientiousness for Work	<-	Interactional Justice	,290	,087	2,985	,003
H2	Work Engagement	<-	Interactional Justice	,258	,135	3,096	,002
H3	Work Engagement	<-	Conscientiousness for Work	,216	,165	2,361	,018

The direct, indirect and total effects in the research model are presented in Table 4.

Table 4: Direct, Indirect and Total Effects

Variables	Effects	Conscientiousness for Work	Work Engagement
	Direct	**,290**	**,258**
Interactional Justice	Indirect	,000	**,063**
	Total	**,290**	**,321**
	Direct	,000	**,216**
Conscientiousness for Work	Indirect	,000	,000
	Total	,000	**,216**

According to the findings obtained in Table 3 and Table 4, the interactional justice perceived by the employee affects his level of conscientiousness for work (290; p= ,003) and work engagement (258; p= ,002) positively and significantly; thus, H1 and H2 are supported. In other words, the perceived fairness of relations to employees increased the sense of conscientiousness for work and the level of work engagement.

When the level of employees' conscientiousness for work is examined for their level of work engagement, it was observed that conscientiousness for work affected the level of work engagement both positively (,216) and significantly (p= ,018); H3 was supported. Therefore, it was determined that the level of work engagement increases with the increased sense of conscientiousness towards work.

Baron and Kenny's (1986) mediating criteria were used to test the hypothesis developed in relation to the mediating effect in the study. According to Baron and Kenny (1986), the following criteria must be found in order to be able to mediate another variable between two variables: a) the independent variable has a significant effect on the dependent variable (b) mediator variable, and c) the mediator variable has a significant effect on the dependent variable. When the mediator variable is added to the analysis, partial mediation is available if the effect of the independent variable on the dependent variable is significantly reduced while if the independent variable does not affect the dependent variable significantly, it is fully mediating. In line with these criteria, the conscientiousness for work, which is the mediator variable, was removed from the model. It was seen that the goodness of fit index of the model without the mediator variable provided the reference criteria (see Table 1). Table 5 shows the results of the path analysis conducted without a mediator variable.

When Table 5 is examined, it is seen that in the model where the instrument variable is absent, interactional justice affects the work engagement positively (,321) and significantly (p< ,001). When the mediator variable (conscientiousness for work) was added to the model, the effect of interactional justice on work engagement continued significantly (,258; p= ,002) (see Table 3). On

the other hand, in the last case, interactional justice had a significant impact on conscientiousness for work (,290; p= ,003); and conscientiousness for work had a significant impact on work engagement (,216; p= ,018) (see Table 3). This implies that conscientiousness for work plays a partial mediating role on the effect of interactional justice on work engagement, therefore H4 is supported.

Table 5: Model Results without Mediator Variable

Predicted Variable		Predictor Variable	Standardized Estimate	S.E.	C.R.	p
Work Engagement	<-	Interactional Justice	,321	,134	3,873	,***

5. Discussion

In this research conducted on 156 manufacturing sector employees, the impact of the perception of interactional justice on conscientiousness for work and work engagement was examined and the following theoretical and practical findings (and implications), which were thought to contribute to the literature, were obtained.

5.1. Theoretical Implications

One of the findings in the research is that the perception of interactional justice affects the conscientiousness for work positively and significantly. In other words, it has been seen that employees who can interact and have "fair" relationships with managers are more prepared and organized in their work, do their work in a planned manner and strive to achieve success.

Another finding in the research is that the perception of interactional justice affects the level of work engagement positively and significantly. In other words, employees who think that managers are fair in their relationships with them are fully engaged in their work and are willing to fulfill their work roles. Therefore, the findings of the study support the literature (Agarwal, 2014; Akşit Aşık, 2016; Ghosh, et al., 2014; Ozer, et al., 2017).

The sense of conscientiousness for work in the study also showed a positive and significant impact on the work engagement. In other words, it was observed that employees with high levels of conscientiousness for their work have become more focused on their work and have been willing to fulfill their work obligations. This finding is paralleled by research findings in the literature (Akhtar, et al., 2015; Mroz, & Kaleta, 2016; Scheepers, et al., 2016; Zecca, et al., 2015).

Findings related to mediating effect in the research showed that the conscientiousness for work has a partial mediating role in the effect of the interactional justice perception on the level of work engagement. The presence of partial mediating means that there may be other mediating variables in the influence of the interactional justice on work engagement. According to the findings, the interactional justice perception positively affects both the direct and indirect (through conscientiousness for work) level of work engagement. Therefore, in the decisions of the manager related to business, when the managers consider the personal needs of employees and are fair in relation to employees, this will increase the sense of responsibility and engagement to employees' work. On the other hand, employees with an increased job-related sense of conscientiousness will concentrate fully on their work and be more energetic in their work.

5.2. Practical Implications

It can be said that the findings obtained in the research support the viewpoint of social exchange theory (Blau, 1964). As stated before, in the direction of social exchange theory, if the organizational managers act appropriately and fairly towards the employees, they also respond with favorable attitudes and behavior towards the organizations (Colquitt, et al., 2001; Cohen-Charash, & Spector, 2001). It is also seen in this research that if managers are respectful, courteous and fair in the communication and interaction with employees, they exhibit useful behavior against mobilizing and as a consequence of this, their level of work engagement is enhanced by the empowerment of their conscientiousness for work. This finding is consistent with the culture of Turkey.

Turkey is one of the countries with high power distance and collectivist culture dominant (Hofstede, 1980). In these countries where the power distance is high, it is important that obedience, title/degree, privilege, status symbols and all transactions are clearly and distinctly determined (Naktiyok, & Yekeler, 2016). In such countries, interpersonal communication and interaction have an accepted value (Rego, & e Cunha, 2010). Thus, in Turkey with the high- power distance and the bureaucratic structure, the quality of relations with managers is more important than the perception of the procedures because of active figures of managers in the bureaucracy (Yurur, & Nart, 2016). In collectivist countries, group harmony, dependency on collective groups and loyalty are important (Seger-Guttmann, & MacCormick, 2014). The employees in these countries are composed of individuals with a high collectivist ideology and these individuals are more sensitive to the needs, feelings and behaviors of others (Wang, et al., 2017). Collectivist employees also focus on maintaining relationships of high quality (Erdogan, & Liden, 2006), pay more attention to the process and consequences of social exchange, and to relations with their managers. Therefore, for high-collectivist employees, the honest, fair and respectful behavior of the leaders for the employees is more important and further strengthens the social exchange awareness (Wang, et al., 2017). Therefore, in Turkey which has a high-power distance and collectivism (Hofstede, 1980), the perception of employees related to interactional justice is important.

When the findings obtained in the research are evaluated in general, it can be seen that the perception of interactional justice and sense of conscientiousness for work are important antecedents for ensuring employees' work engagement. In terms of employees, positive organizational outcomes will be achieved through the full focus on jobs, willingness to fulfill their work-related obligations and the being more energetic in their work. Organizational commitment, organizational citizenship behavior, job satisfaction and job performance of employees engaged in work are increasing (Hallberg, & Schaufeli, 2006; Yalabik, et al., 2013; Kataria, et al., 2013; Lee, & Ok, 2016) and their turnover intention is decreasing (Yalabik, et. al., 2013). On the other hand, it is suggested that work accidents are decreasing in enterprises with high work engagement (Harter et al., 2002; Robbins, & Judge, 2013). Given the fact that the sector where our research was conducted was on employees engaged in screw manufacturing (metal industry) and given that work accidents are most experienced in the metal sector (Erginel, & Toptanci, 2017), the importance of employees concentrating on their work and being energetic at work is better understood. Therefore, employees who are fully engaged and transfer all their energy to work will be satisfied with their work, will be committed to their organizations and will behave beyond their job descriptions. They will also be less likely to experience work accidents as they are more cautious in their work.

To summarize the implications of the research in accordance with the findings; the research dealt with the concept of work engagement in the context of Turkey -where there are low levels

of work engagement (Schaufeli, 2018) - and proved that employees are more engaged in their jobs with the perception of interactional justice. In addition, it was examined how interactional justice affects the engagement to work. Conscientiousness, which is likely to be a variable in a mediator, is not generally considered as a personality but as a work-oriented feeling. It was determined that interactional justice strengthened both direct and indirect (through conscientiousness for work) work engagement. Therefore, the findings coincide with the perspective of social exchange; that is, in return for managers to have a fair interaction with employees, employees' conscientiousness for work have been strengthened and ultimately more engaged in their work. Therefore, it was confirmed that interactional justice was important for strengthening the work engagement.

Considering the findings, some recommendations can be presented to managers, as follows: managers should consider the personal needs of employees and show respect and dignity to them in order to connect employees with work and organization; provide their integration to organization and adapt personally to their organization. They should consider the personal rights of employees in their business decisions and clearly tell employees "why they are making these decisions". They should be fair in relation to employees and tolerate mistakes rather than punish them. In addition, they should consider the suggestions and complaints about employees and make necessary corrections; and, they should adopt organizational practices that will increase their sense of conscientiousness in the work of employees.

5.3. Limitations and Suggestions

In the study, there are some limitations besides the contributions made in the literature with the findings obtained. One of these limitations is that the data were obtained quantitatively and cross-sectionally, depending on the pre-prepared questionnaire. The data are limited to employees of only one manufacturing industry operator. In future research, employees from different businesses in the same sector could be included and the research model could be evaluated accordingly. On the other hand, the finding that the conscientiousness for work has a partial mediating role in the effect of the interactional justice perception on the level of work engagement in the research suggests that other variables in the model can also play a mediating role. Considering this situation, it is suggested that future researchers should add other mediator variables (organizational identification, cynicism and perception of political behavior etc.) and test the model in this direction.

As stated earlier, the levels of the employees' work engagement in countries like Turkey, where there is high power distance, is low (Schaufeli, 2018). Determining the factors that will increase the levels of employees' work engagement in these countries will contribute to economic indicators such as productivity. Because, increasing work engagement reduces job accidents (Harter, et al. 2002, Robbins, & Judge, 2013), people are happier and more satisfied with their work; thus, work engagement positively affects economic indicators such as productivity (Schaufeli, 2018). Therefore, detection and investigation of the mechanisms affecting the work engagement is of great importance in Turkey. In this study, although the mechanism affecting work engagement (a mechanism involving interactional justice and conscientiousness for work variables) has been identified, other variables that determine work engagement need to be identified. Furthermore, the research model could be expanded by including moderator variables such as culture, positive / negative affect, organizational obstacle, and mediator variables such as perception of political behavior, identification with organization and leader.

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