Organizational justice perception and organizational citizenship behavior of shipyard workers: the role of identification and emotional intelligence

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Abstract

Purpose – The purpose of this study is to review whether organization identification has a role of mediation and whether emotional intelligence (EI) has a role of moderating in the relationship between organizational justice perception (OJP) and organizational citizenship behavior (OCB).

Design/methodology/approach – In order to achieve the aim of the research, the data obtained from 388 employees of six shipyards in Yalova-Altinova Shipyards by survey technique were analyzed. To test the research hypotheses, SPSS (v22) PROCESS macro (v3.4) plugin developed by Hayes (2019) and Model 4 and Model 5 were used via the Bootstrap 5,000 sampling technique.

Findings – This study found that OJP impacts organizational identification (OI) and OCB. In addition, the research findings indicate that OI positively impacts OCB. This research reveals that OI played a mediating role in the relationship between OJP and OCB. However, the authors do not find support for the hypothesis that direct effect of OJP on OCB differs depending on the level of EI level.

Research limitations/implications – The major limitation of this study is its sample that included only employees in shipyards. The results of this study will hopefully offer important insights into understanding and directing the human resources in shipyards conducting activities of construction, manufacturing, maintenance on the ships available at the center of maritime transportations.

Originality/value – This study draws attention to the causal relationships between the perception of OJP, OCB, OI and EI, which affect the organizational attitudes and behaviors of employees.

Keywords Organizational justice, Identification, Citizenship, Emotional intelligence, Shipyard workers, Maritime business

Paper type Research paper

1. Introduction

In today’s competitive conditions, meeting the expectations of the employees who play a key role in achieving the goals of business organizations by creating added value is a prerequisite for the organizations. Human beings position themselves by straining the events they face from their filter of values while constantly interacting their environments. Employees develop specific acts against the organization according to the result regarding whether being an equal or not by comparing themselves with individuals or groups socially in the ongoing processes from inputs to outputs (Adams, 1963). Organizational justice perception (OJP), which is identified as a level of belief referring the relationship of employee and their organization to be fair, egalitarian and ethic, can provide benefits such as trust and commitment, increase in work performance, more beneficial citizenship behaviors
Cropanzano et al., 2007, p. 35). OJP is the entirety of fair distribution of resources in the workplace, procedures effecting decision-making process and justice perceptions during social interaction process (Herr et al., 2018, p. 15). Positive thought in justice perception causes employee to exhibit positive organizational citizenship behaviors (OCBs) such as commitment, adaptability, cooperativeness and respectfulness toward other employees (Rauf, 2015, p. 151). Another study in the literature presents the outputs of employees in business life about studies related to OCB. The study performed by Organ in 1988 reviews OCB based on five main aspects: conscientiousness, altruism, courtesy, sportsmanship and civil virtue (Lim and Loosemore, 2016, p. 97). Employees with positive OCB offers positive contributions to organizational success and to their colleagues without expecting anything personal for the success of the organization that they are committed.

Another condition determining the work behaviors of the employee within the organization and necessary for the success of organization is the emotion of organizational identification (OI) (Lee, 1969, p. 327). OI means “unity” feeling in the relationship of employee with his organization (Ashforth and Mael, 1989, p. 34) and reflects the attitudes and behaviors of employee in proportion to identification levels and causes either positive or negative behaviors (Beldek, 2017, p. 17). When employee considers the identity of the organization beyond the identities of other organizations and the characteristics with which employee believes identifying the organization match up with individuality term to a large extent, the employee powerfully identifies with his/her organization (Dutton et al., 1994, p. 239). Thus, the individuals with high OI levels can provide the motivation required to maintain the success by themselves, since they will consider the success of organization as their own.

Emotional intelligence (EI), which has a positive and meaningful relationship with altruism, one of the OCB extents (Carmeli and Josman 2006, p. 415), is the most effective tool that enhances loyalty of employees to their organization, helps development of social relationship and contributes to the success of organization (Dixit and Singh, 2019, p. 26). In the widest sense, EI means some kind of competence required for individual for defining, processing and managing the feelings of others (Zeidner et al., 2008, p. 64). Employees with high EI level are successful in developing self-observation, powerful coordination, developing empathy, social adaptation, good relations with surroundings and marriage (Schutte et al., 2001, pp. 534–535). While employees with high EI impact their colleagues in a positive way through powerful connections with them, managers with high EI will contribute to the success of organization by providing an optimum benefit from their employees.

In the literature, even though there are studies available on OCB, OJP, OI and EI perception of the employees, there has been no study investigating all of these four subjects or the role between EI, OI, OJP and OCB. Shipyards, one of the most important components of maritime transport system, is a labor-intensive sector in which maintenance procedures are followed both in crisis periods and after crisis periods to meet the increased need of new ship construction. There are a total of 78 shipyards in Turkey, a country surrounded by water on three sides, and 26 of them are located in the city of Yalova. These shipyards carry out activities for private sector, such as ship and yacht construction and maintenance (GISBIR, 2019, p. 12). Shipyards, which allow for ship construction and other maintenance activities, have an important share in the economic growth and development of countries, with their contribution to employment and support to merchant marine fleet and technology transfer. Due to their acquired knowledge, shipyards have a strategic importance and play a key role for the industrial development of a country. Shipyards are one of the pivotal organizations that support welfare and regional growth and have an increasing contribution to employment day by day in proportion to their capacity and numbers. Shipyards are a heavy branch of industry, which creates 1:7 rate with shipyard sub-industry according to GISBIR (2019) report, and around 25,000 people are employed in Yalova-Altınova Shipyards Region. Labor and quality are just as significant as the existence of shipyards, which have a great strategic
and economic importance. The literature on maritime sector and shipyard employees related to the aforementioned subjects is scarce. Thus, the importance of this study lies in offering preliminary findings in regard to this subject. The purpose of this study is to add to the literature by investigating whether shipyard employees have the role of mediator OI and EI has the role of moderator in the relationship between OJP and OCB. This study will further provide significant insights for the scholars studying in this subject and the managers of shipyards, which are key for both the economy and development of a country.

2. Literature review and hypotheses

*Distribution justice*, as the first fundamental dimension of OJP, is the perception of how fair are the gains of employee at the end of their interactions in workplace (Nowakowski and Conlon, 2005). Thus, the concept of distribution justice can be also defined as a perception of whether claims of the individual are given fairly by the organization or managers. *Procedural justice*, which is another dimension of OJP, is the response to not only the results taken but also the procedures (or processes) these results have been acquired from (Thibaut and Walker, 1975). Employees are inclined to accept the discretion of the authority when they perceive the processes taken in a decision as fair (Wang and Nayir, 2010, p. 67). Another matter affecting the development of employee’s sense of justice is transactional perception of justice. According to Cohen-Charash and Spector (2001, p. 281), *transactional justice* is an extension of procedure justice and related to attitude and behaviors of managers when they convey procedural and distribution justice to employees. As a result, a problem in the transactional perception of justice may cause an employee to exhibit a behavior against their employer or organization directly. Procedural justice perception within an organization indirectly supports OCB (Moorman et al., 1998).

*Altruism*, one of the extents of OCB, means voluntary support of an employee toward another employee who experiences a problem (during orientation or for all kinds of problems that they may face during their shift) without expecting any return (Posdakoff and Mackenzie, 1999, p. 351). *Conscientiousness* means the contribution of individuals to their organization selflessly by acting beyond their duty and responsibilities related to the works referred to them (to waive from right to get a break to complete their duties, to start working early, to leave work late etc.) (Allison et al., 2010, p. 284). Employees want to ensure the business continuity in the workplace without complaining about issues or small inconveniences that they may face in the workplace and thus tolerate such problems at the dimension of *sportsmanship* (Ryan, 2002, p. 128).

*Civic virtue* behavior may be described as the commitment of employees to organization and characterized by entire behaviors such as watching for an opportunity for their organization, sharing opinions that will make positive contributions or putting the interests of their organization over their own interests (Podsakof et al., 2000, p. 525). *Courtesy*, allowing an employee to work with their colleagues in a comfortable and effective way, is an act of preventing problems that may be faced by prioritizing the respect in attitudes and behaviors of employee toward their colleagues (Konovsky and Organ, 1996, p. 255). That being said, employees with high OCB considerably support the success of their organization by working selflessly, coherently and altruistically at the workplace.

2.1 *The relationship between organizational justice perception and organizational citizenship behavior*

There are various studies in the literature that discuss the OJP s and OCBs of employees. One of them was carried out by Mehdipour et al. (2019) with a total of 265 female teachers in Iran through random sampling and ascertained that organizational justice variant has a greater effect than on cultural intelligence than on citizenship behavior. The study by Roohi (2018)
was performed with 108 participants working in universities in Tehran and pointed out that there is a significant correlation between OJP components and OCB dimensions (Roohi, 2018). Lastly, a study was carried out in Izmir, Turkey, with a total of 154 instructors of a university and showed that there is a positive and significant relationship between the OJP and OCB of instructors (Çağlayan, 2014). These being said, it is clear that OJP has a direct and positive effect on OCB; thus, it is necessary to increase the OJP levels of employees to raise their OCB levels. Based on this, hypothesis 1 (H1) is proposed.

**H1.** Organizational justice perception positively impacts organizational citizenship behavior.

### 2.2 The mediating role of organizational identification

Another term in the literature interacting with OJP and OCB is OI. A study conducted with 220 participants in a public hospital and a mouth and dental health center and found that the effect of OI of employees on OCB was greater than organizational trust perception (Tokgöz and Seymen, 2013). Another research with 130 employees working in headquarters of a multinational bank in Korea and 135 students (73 of them are MBA holders whilst 62 are undergraduate students) studying and working in USA, concluded that there is a significant relation between OJP and OI and argued that procedural justice has a direct impact on OCB and that OI plays a mediating role between procedural justice perception and OCB (Cho and Treadway, 2010). Further, another study with 202 local officials in the Sichuan province of China, determined that procedural and transactional justice impact the OIs of employees, that OIs positively affect their OCB and that OI plays a role of mediator in the relationship between procedural and transactional justice and OCB (Wang and Jiang, 2015). The findings of another study with 220 employees in a private organization in China, reported that OJP affects the OIs of employees, their OI levels positively affect their OCBs and that OI plays a role of mediator on the relationship between OJ and OCBs (Guangling, 2011). A more comprehensive study was performed in South Korea with 284 participants from different areas such as information technologies, manufacturing, research institute, finance and public services and ascertained that OI mediates in the effect of distributive and transactional justice perceptions on OCBs, and while procedural justice has no positive relationship with OI, distribution justice have the most powerful effect on both OI and OCB (Choi et al., 2013). The results of another research with 169 pre-school teachers clearly showed that OJP of teachers have a positive effect on their OI and that OI greatly affects their OCBs (Demir, 2015). In light of these studies, it can be perhaps argued that OI of employees has a separate and positive effect on both OCBs and OJPs and plays a role of mediator between OJP and OCB. Accordingly, increasing OI levels of employees will also increase their OJPs and this will further direct and indirect encourage employees to develop more positive OCBs. Based on these, the hypotheses below are proposed:

**H2.** Organizational justice perception positively impacts organizational identification.

**H3.** Organizational identification positively impacts organizational citizenship behavior.

**H4.** Organizational identification plays a role of mediator on the relationship between organizational justice perception and organizational citizenship behavior.

### 2.3 The moderating role of emotional intelligence

Even though there is no study in the literature on the relationships between EI, OCB and OJP, a number of studies have been performed in the recent years that separately investigate these concepts. A study was performed with a total of 453 nurses in Korea aimed to investigate the relations between EI, OCB and organizational commitment and organizational performances...
of clinic nurses and concluded that EI positively affects OCBs (Jeon and Koh, 2014). Another study conducted with 420 employees working in information technologies in China, to investigate the mediation role of OJP in the effect of EI on customer satisfaction and indicated that EI, OJP and job satisfaction had a significant relation with each other and that OJP partially mediated the relationship between EI and job satisfaction (Ouyang et al., 2015). The relationship between EI and OJP was further reported by Zhu et al. (2015), who conducted a study with the participation of 511 nurses from 4 different hospitals in China and concluded that EI and OJ positively impacted the participation of nurses and that there is a statistically positive and significant relationship between OJP and EI. A review of the relevant literature shows that no study has previously reported that EI mediates on the relationship between OCB and OJP; on the other hand, it is notable that EI positively affects the OJPs and OCBs of employees and positively contributes to organizations of employees with higher EI. Based on these findings, H5 and the investigation model in Figure 1 were proposed and developed.

**H5.** Direct effect of organizational justice perception on organizational citizenship behavior differs depending on the level of emotional intelligence level.

**3. Research method**

**3.1 Sampling and data collection**

For the conduct of this study, the surveys were obtained through face-to-face interviews from a total of 388 employees of six shipyards enterprises which operate in the Region of Yalova-Altınova Shipyards in Turkey between November 2019 and March 2020. Based on the interviews with the human resources departments of 26 shipyard businesses serving in the Region of Yalova-Altınova Shipyards, this study was conducted with six shipyards which voluntarily participated in the research. The shipyard employees were notified that the participation was completely voluntary, that their names would be kept anonymously and that the data would be used for completely scientific purposes. Once the participants agreed with these terms, the surveys were administered. The majority of the participants were male (326 people, 84%), between 31 and 40 years old (164 people, 42.3%), holders of high-school diploma (213 people, 54.8%), blue-collar (342 people, 88.1%), married (212 people, 54.6%), had a work experience between 4–7 years (203 people, 52.3%). It is also notable that only 8 participants (2.1%) were aged over 55 years; 46 participants (11.9%) were white-collar and 15 participants (3.9%) had a work experience over 15 years.

**3.2 Measures**

For the scale of OJP, the scale by Yıldırım (2007) was used for Turkish adaptation and validity and safety analysis (Cronbach’s alpha > 0.80). Used in all of this study the exploratory factor analysis (EFA), using the principal components analysis and Varimax rotation method assessed the consistency of OJP scale factor with 20 phrases and three dimensions of transactional, distribution and procedural justice and that there were three dimensional

![Organizational Justice Perception](image1.png)  
**Figure 1.** Research model
structures with eigenvalue greater than 1 (KMO = 0.962; $\chi^2 = 7732.764$; df = 190; $p < 0.001$; factor loads between 0.694–0.876; total explained variance: 76.8%). [The findings from the EFA analysis showed that transactional justice: 32.7%; distribution justice: 23.3% and procedural justice: 20.8%].

A scale with five dimensions and 20 phrases was used by Bolat (2008) to measure OCB (Cronbach’s alpha > 0.90). The EFA on the scale of OCB, was performed excluding two items not assigned to any dimension and revealed that it had five dimensional structures with eigenvalue over 1. (KMO = 0.910; $\chi^2 = 4370.849$; df = 190; $p < 0.001$; factor loads between 0.585–0.875; total explained variance: 69.3%). [EFA: altruism: 17.7%; courtesy: 15.3%; sportsmanship: 13.4%; conscientiousness: 12.1% and civil virtue: 11.8%].

A scale factor with six questions and one dimension developed by Mael and Ashforth (1992) was used to measure OI (Cronbach’s alpha > 0.90). The EFA on the scale of OI, showed that there was only one dimension with eigenvalue over 1 (KMO = 0.905; $\chi^2 = 1761.176$; df = 15; $p < 0.001$; factor loads between 0.846–0.888; EFA: 74.2%).

A scale factor with 12 items and four dimensions used by Chan (2004) was used to measure EI level (Cronbach’s alpha > 0.80). The EFA on the scale of EI, showed that there were four dimensional structures with eigenvalue over 1 (KMO = 0.899; $\chi^2 = 2932.245$; df = 66; $p < 0.001$; factor loads between 0.616–0.848; factor loads between: 79.2%). [EFA: emotional evaluation: 20.9%; sensitivity: 20.4%; emotion control: 19.8%; positive use of emotions: 18.1%].

The statements in all scales in this study were grouped based on the five Likert rating system (1 = strongly agree, 5 = completely disagree).

3.3 Analytical strategy

The data obtained from the shipyard employees using survey technique were analyzed through SPSS and AMOS (v22) statistical software. Confirmatory factor analysis (CFA) was performed following the EFA analysis to determine the structural validity of the measurement model, and the Cronbach’s alpha parameter was used to determine its internal consistency. To test the research hypotheses, SPSS (v22) PROCESS macro v3.4 plugin developed by Hayes (2019) and Model 4 and Model 5 were used via the Bootstrap 5,000 sampling technique.

4. Findings

4.1 Validity and reliability analysis

Table 1 presents the results of second-level multi-factor CFA analysis carried out to determine the structural validity of the measurement model. The results of the first-level multi-factor CFA on the scales of OJP, OCB and EI available in the measurement model confirmed that these scales respectively had 3, 5 and 4 dimensions; the second-level multi-factor CFA was conducted for the purpose of one dimensional study. It was found that each standardized factor loadings of the assessed variables was greater than 0.65 and statistically

| Scales | $\chi^2$ | sd  | $\chi^2$/sd | CFI | TLI   | RMSEA | SRMR  | Std. $\beta$ |
|--------|---------|-----|-------------|-----|-------|-------|-------|--------------|
| OJP    | 437.583 | 165 | 2.652       | 0.965 | 0.959 | 0.065 | 0.038 | 0.723–0.909*** |
| OCB    | 347.628 | 128 | 2.716       | 0.945 | 0.934 | 0.067 | 0.039 | 0.691–0.904*** |
| OI     | 18.847  | 7   | 2.692       | 0.993 | 0.986 | 0.066 | 0.010 | 0.787–0.868*** |
| EI     | 123.434 | 49  | 2.519       | 0.974 | 0.965 | 0.063 | 0.028 | 0.655–0.892*** |

Table 1. Results of the confirmatory factor analysis

Note(s): *** $p < 0.001$ [$\chi^2$ = Chi-Square, df = Degrees of Freedom, TLI = Tucker Lewis Index, CFI = Comparative Fit Index, Residual RMSEA = Root Mean Square Error of Approximation, SRMR = Standardized Root Mean Square, Std. $\beta$ = Standardized Beta]
(\(p < 0.001\)) significant based on the findings of the CFA analysis in Table 1. In addition to that, Table 1 clearly shows that the goodness-of-fit values of all scales in the measurement model are within acceptable limits (Hu and Bentler, 1999; Hair et al., 2014).

The Cronbach’s alpha parameters were calculated to assess the reliability of the measurement model with a confirmed validity and Table 2 presents Pearson correlation, coefficient of skewness and coefficient of Kurtosis.

Table 2 shows that the measurement tools are reliable since the Cronbach’s alpha parameters of all variables are greater than 0.70 (Hair et al., 2014) and the relationship between variables is significant (\(p < 0.01\)). As seen in Table 2, the coefficient of skewness and coefficient of kurtosis of variables varied between (−1.066; −1.414) and (1.650; 3.954) and thus the data indicated a normal distribution as the values were between ±3 and ±10 (Kline, 2016). The Harman’s single-factor analysis was also performed to determine any common method bias that may occur when the independent and dependent variables included in the survey are administered to the same participants at the same time, and therefore, this bias was checked as well (Podsakoff et al., 2003). The statements related to OCB, the dependent variable, were first included in the survey; following that, the statements related to EI, OI and lastly, the independent variable OJP, were included to make sure that the scale was balanced. Further, the EFA analysis on all items in the measurement tool was performed using principal component analysis without rotation and it was revealed that the factor components had eigenvalues over 1 and identified a structure with 10 factors, explaining 71.1% of the total variance and the first factor explaining 12.3% of the total variance. In other words, the EFA analysis without rotation determined that there was more than one factor and that the first factor did not significantly explain the provided total variance. Lastly, a CFA analysis, where all variables in the model were loaded on a single factor, was implemented and no common method bias was identified (Podsakoff et al., 2003) as the goodness-of-fit values of the single-factor model were below the acceptable limits.

4.2 Hypothesis testing

Table 3 indicates the results of the test on the relationship between OJP and OCB through the plugin of PROCESS macro (v3.4) developed by Hayes (2019) in the SPSS (v22) program on the mediation role of OI with a bootstrap resampling with 5,000 replications on Model 4. As seen in Table 3, all the models are statistically significant.

Table 3 also shows that the total effect of OJP on OCB is statistically significant (\(B = 0.278; t: 9.778; p < 0.001\)). It is also notable that OJP positively affects OI (\(B = 0.516; t: 14.337; p < 0.001\)). Looking at the combined effect of OJP and OI on OCB on Table 3, one can conclude that the effect of OJP gradually decreased and OI has a positive effect on OCB (\(B = 0.423; t: 12.439; p < 0.001\)). Moreover, OJP and OI explain approximately 43% of the change in OCB (\(R^2 = 0.428\)). The confidence intervals obtained using the Bootstrap analysis confirmed the indirect effect of OJP on OCB through OI. It was concluded that OI was a mediating variable because the accelerated and corrected bias confidence interval (BCA CI) using the Bootstrap

| Fact | Mean | SD  | Skewness | Kurtosis | 1    | 2    | 3    | 4    |
|------|------|-----|----------|----------|------|------|------|------|
| 1. OJP | 3.537 | 0.040 | −1.379 | 1.650 | (0.965) | 0.446** | 0.589** | 0.189** |
| 2. OCB | 3.789 | 0.025 | −1.414 | 3.954 | (0.915) | 0.650** | 0.159** |
| 3. OI | 3.673 | 0.035 | −1.225 | 1.821 | (0.930) | 0.115** |
| 4. EI | 3.914 | 0.026 | −1.066 | 2.551 | (0.917) |            |

Table 2. Means, skewness, Cronbach’s alpha, Kurtosis and Pearson correlation

Note(s): **\(p < 0.01\); The parentheses identify the Pearson correlation coefficients. [SD = Standard Deviation, SE = Standard Error, B = Beta]
analysis was statistically significant ($B = 0.218; p < 0.05; 95\% \text{ BCA CI} [0.157; 0.286]$) and did not include zero (MacKinnon et al., 2004). The Sobel test was carried out to determine whether the mediator role was statistically significant. The results indicated that it was statistically significant ($z = 9.395; \text{SE} = 0.023; p < 0.01$). Hypotheses 1, 2, 3 and 4 were accepted according to these findings.

SPSS (v22) PROCESS macro (v3.4) plugin was used to determine whether the EI levels of the shipyard employees had a moderating effect in the direct relationship between OJP and OCB. Table 4 presents the results of the analysis using Model 5 and Bootstrap 5,000 resampling technique. Table 4 shows that the model where moderating impact assessment was carried out was statistically significant ($R^2 = 0.438; F = 74.766; p < 0.001$); however, the effect of interaction term (OJP*EI) on OCB was not statistically significant ($B = 0.077; \text{SE} = 0.008; t = 1.779; \text{SE} > 0.05$). The fact that interaction term was not statistically significant indicates that EI does not have any moderating role in the direct effect of OJP on OCB. Hypothesis 5 was not accepted according to these findings.

5. Discussion and conclusion

This study, which aims to investigate the relationship between the OJP and OCB of shipyard employees and moderating effect of EI and intervening variable effect of OI in this relationship, concluded that OJP has both a direct and indirect effect on OCB via OI, and EI had no moderating effect on this direct relationship. In other words, OI has the effect of intervening variable in the relationship between OJP and OCB, and EI has no moderating effect. To test the research hypotheses, SPSS (v22) PROCESS macro (v3.4) plugin developed by Hayes and Model 4 and Model 5 was used using the Bootstrap 5,000 paradigm. The findings demonstrated that 4 of the 5 hypotheses proposed were accepted whereas one of them was rejected.

The fact that OJP has both a direct and indirect effect on OCB, in other words, the fact that when OJP is analyzed with OI, the effect of OJP continues but decreases, means that OI

| Variables | B | SE | t   | LL | UL |
|-----------|---|----|-----|----|----|
| Constant  | 2.507 | 0.140 | 17.861*** | 2.231 | 2.783 |
| OJP       | 0.042 | 0.030 | 1.404 | -0.017 | 0.102 |
| OI        | 0.421 | 0.033 | 12.343*** | 0.354 | 0.478 |
| EI        | 0.063 | 0.037 | 1.657 | -0.137 | 0.010 |
| OJP*EI    | 0.077 | 0.043 | 1.779 | -0.008 | 0.163 |

Model summary: $R^2 = 0.438; F = 74.766 (4; 383); p < 0.001$; (OJP*EI) Δ$R^2 = 0.004; F = 3.165 (1; 383)

**Note(s):** ***$p < 0.001$. CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit; Dependent Variable = OCB
has a partial intervening variable effect in this relationship. Based on these findings, the results of the studies performed in sectors showing the different positive effects of OJP on OCB (Çağlayan, 2014; Roohi, 2018; Mehdipour et al., 2019) are congruent with the results of the studies performed in different sectors showing that OI has an intervening variable role in the relationship (Cho and Treadway, 2010; Guangling, 2011; Choi et al., 2013; Demir, 2015; Wang and Jiang, 2015). The main reason why OJP has a positive effect on OCB among shipyard employees is the fact that people react based on their perceptions while constantly interacting their environments. The behaviors of the shipyard employees will be positively affected when they see and feel that the decisions about them and their colleagues are taken fairly, managers have an equal approach toward employees without making any discrimination, and the pre-set rules are followed in the workplace. For the sake of the organization they work for, they will make sacrifice to ensure its success by working more relentlessly. When shipyard employees believe that they are treated fairly in any decision taken and equally awarded in the organization, their relationships with their colleagues will improve. They will work by taking responsibility at the workplace. If managers act transparently and as fairly in every decision, justice perception of the employees will also be strengthened. In this case, employees will exhibit a more powerful citizenship concept and endeavor more for the success of shipyard which they are affiliated with. The fact that OI plays a partial intermediate variable role indicates that the foundation between OJP and OCB partially depends on OI. In other words, shipyard employees need to be identified with OJP and their organizations need to exhibit OCB as well. When employees consider practices within the organization fair, they identify themselves with the organization, resulting in more OCBS among them. The fact that EI does not have a moderating role in the relationship between OJP and OCB indicates that the positive effect of organizational justice perceived by shipyard employees on OCB is not shaped by their EI levels. OJP has a direct effect on OCB as well as an indirect effect on OI; that is to say, it is important to provide not only OJP but also to acquire OI. Likewise, the findings of this study emphasize that when organizational justice is ensured in shipyard businesses, OI will increase, causing employees to exhibit stronger OCB. Shipyard managers can encourage their employees to exhibit stronger OCB by embracing a transparent management approach and showing that justice is provided to employees under all circumstances events, and awards and punishments are distributed fairly, and procedures are applied equally to everyone, whether they are blue-collar or white-collar. Shipyard managers can show that they value their employees by taking polls before making a decision within the workplace (such as regulating working hours as summer/winter, the selection of catering company, etc.); in this way, they can imply that they value the opinions and ideas of their employees. In addition to that, managers can instil their employees with the idea that this is more than just a workplace, by enhancing interaction between manager-manager, employee-manager, employee-employee and creating social environments where managers and employees can organize events together. Thus, the identification of employees with their workplace will increase and employees will consider the success or failure of their workplace as their own and thus continue to work with a maximum performance in the most efficient way. Employees, with a key role in using the workforce more efficiently and in helping organizations achieve their goals, are social creatures. All variables in this study directly affect human nature and indirectly contribute to the performance of employees by affecting each other positively or negatively.

6. Limitations and recommendations
The major limitation of this study is its sample that included only employees working in shipyards. Therefore, the findings are limited to this sampling. In addition to that, the study
was implemented on shipyard employees in the workplaces in the Region of Yalova-Altınova Shipyards, which is an important obstacle against the generalization of the findings of this study to other regions. This study thus suggests further studies to investigate the variables included in this study with a wider sampling or employees in different sectors. Also, more in-depth studies may be performed to improve the investigation model by adding different variables and to explore situational mediation effects, given that the variables forming OCB of employees are not limited to OJP, OI and EI.

References
Adams, J.S. (1963), “Toward an understanding of inequity”, The Journal of Abnormal and Social Psychology, Vol. 67 No. 5, pp. 422-436.
Allison, B.J., Voss, R.S. and Dryer, S. (2010), “Student classroom and career success: the role of organizational citizenship behavior”, The Journal of Education for Business, Vol. 76 No. 5, pp. 282-288.
Ashforth, B.E. and Mael, F. (1989), “Social identity theory and the organization”, Academy of Management, Vol. 14 No. 1, pp. 20-39.
Beldek, E.G. (2017), “Örgütsel özdeşlemeyi ve örgütsel sinizm ve örgütsel muhalefet ile ilişkisi: örgütlü bir araştırma”, Örgütsel Davranış Araştırmaları Dergisi, Vol. 2 No. 1, pp. 16-47.
Bolat, T. (2008), Dönüşümü Liderlik, Personeli Güncelleme Ve Örgütsel Vatandaşlık Davranışı İlişkisi, Detay Yayıncılık, Ankara.
Çağlayan, E. (2014), “Öğretim elemanlarının örgütsel vatandaşlık davranışları ile örgütsel adalet algıları arasındaki ilişki”, Kurum ve Uygulamada Eğitim Yönetimi [Educational Administration: Theory and Practice], Vol. 20 No. 4, pp. 421-452.
Carmeli, A. and Josman, Z.E. (2006), “The relationship among emotional intelligence, task performance, and organizational citizenship behaviors”, Human Performance, Vol. 19 No. 4, pp. 403-419.
Chan, D.W. (2004), “Perceived emotional intelligence and self-efficacy among Chinese secondary school teachers in Hong Kong”, Personality and Individual Differences, Vol. 36 No. 8, pp. 1781-1795.
Cho, J. and Treadway, D.C. (2010), “Organizational identification and perceived organizational support as mediators of the procedural justice–citizenship behaviour relationship: a cross-cultural constructive replication”, European Journal of Work and Organizational, Vol. 20 No. 5, pp. 631-653.
Choi, B.K., Moon, H.K., Ko, W. and Kim, K.M. (2013), “A cross-sectional study of the relationships between organizational justices and OCB Roles of organizational identification and psychological contracts”, The Leadership & Organization Development Journal, Vol. 35 No. 6, pp. 530-554.
Cohen-Charash, Y. and Spector, P.E. (2001), “The role of justice in organizations: a meta-analysis”, Organizational Behavior and Human Decision Processes, Vol. 86 No. 2, pp. 278-321.
Cropanzano, R., Bowen, D.E. and Gilliland, S.W. (2007), “The management of organizational justice”, Academy of Management Perspectives, Vol. 21 No. 4, pp. 34-48.
Demir, K. (2015), “The effect of organizational justice and perceived organizational support on organizational citizenship behaviors: the mediating role of organizational identification”, Eurasian Journal of Educational Research, Vol. 15 No. 60, pp. 131-148.
Dixit, O. and Singh, S. (2019), “Moderating influence of emotional intelligence on organisational citizenship behaviour and counterproductive work behavior”, Journal of Strategic Human Resource Management, Vol. 8 No. 1, pp. 26-31.
Dutton, J.E., Dukerich, J.M. and Harquail, C.V. (1994), “Organizational images and member identification”, Administrative Science Quarterly, Vol. 39 No. 2, pp. 239-263.
GISBIR (2019), *Gemi İnşa, Bakım-Onarım Sektörü 2017-2018 Yılları İstatistiksel Verileri*, GISBIR, Istanbul.

Guangling, W. (2011), “The study on relationship between employees’ sense of organizational justice and organizational citizenship behavior in private enterprises”, *Energy Procedia*, Vol. 5, pp. 2030-2034.

Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2014), *Multivariate Data Analysis*, 7th ed., Prentice Hall, Upper Saddle River, NJ.

Hayes, A.F. (2019), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, 2nd ed., Guilford publications, New York.

Herr, R.M., Bosch, J.A., Loerbroks, A., Genser, B., Almer, C., Vianen, A.E. and Fischer, J.E. (2018), “Organizational justice, justice climate, and somatic complaints: a multilevel investigation”, *Journal of Psychosomatic Research*, Vol. 111, pp. 15-21.

Hu, L.T. and Bentler, P.M. (1999), “Cut off criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives”, *Structural Equation Modeling: A Multidisciplinary Journal*, Vol. 6 No. 1, pp. 1-55.

Jeon, K.-D. and Koh, M.S. (2014), “Comparative study of emotional intelligence, organizational citizenship behavior organizational commitment and organizational performance of clinical nurses in Korea”, *Korean Academy of Nursing Administration*, Vol. 20 No. 4, pp. 446-454.

Kline, R.B. (2016), *Principles and Practice of Structural Equation Modeling*, 4th ed., The Guilford Publications, London.

Lee, S.M. (1969), “Organizational identification of scientists”, *Academy of Management Journal*, Vol. 12 No. 3, pp. 327-337.

Lim, B.T. and Loosemore, M. (2016), “The effect of inter-organizational justice perceptions on organizational citizenship behaviors in construction projects”, *International Journal of Project Management*, Vol. 35 No. 2, pp. 95-106.

MacKinnon, D.P., Lockwood, C.M. and Williams, J. (2004), “Confidence limits for the indirect effect: distribution of the product and resampling methods”, *Multivariate Behavioral Research*, Vol. 39 No. 1, pp. 99-128.

Mael, F. and Ashforth, B.E. (1992), “Alumni and their alma mater: a partial test of the reformulated model of organizational identification”, *Journal of Organizational Behavior*, Vol. 13 No. 2, pp. 103-123.

Moorman, R.H., Gerald, L.B. and Niehoff, B.P. (1998), “Does perceived organizational support mediate the relationship between procedural justice and organizational citizenship behavior”, *Academy of Management Journal*, Vol. 41 No. 3, pp. 351-357.

Nowakowski, J.M. and Conlon, D.E. (2005), “Organizational justice: looking back, looking forward”, *International Journal of Conflict Management*, Vol. 16 No. 1, pp. 4-29.

Ouyang, Z., Sang, J., Li, P. and Peng, J. (2015), “Organizational justice and job insecurity as mediators of the effect of emotional intelligence on job satisfaction: a study from China”, *Personality and Individual Differences*, Vol. 76, pp. 147-152.

Podsakoff, P.M., MacKenzie, S.B., Paine, J.B. and Bachrach, D.G. (2000), “Organizational citizenship behaviors: a critical review of the theoretical and empirical literature and suggestions for future research”, *Journal of Management*, Vol. 26 No. 3, pp. 513-563.

Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003), “Common method biases in behavioural research: a critical review of the literature and recommended remedies”, *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.
Posdakoff, P.M. and Mackenzie, S.B. (1999), “Organizational citizenship behaviors and sales unit effectiveness”, *Journal of Marketing Research*, Vol. 31 No. 3, pp. 351-363.

Rauf, F. (2015), “What role does job satisfaction play on the relationship between organizational justice perception and organizational citizenship behavior? Empirical evidence from Sri Lankan employees”, *European Journal of Business and Management*, Vol. 7 No. 15, pp. 149-162.

Roohi, M. (2018), “The relationship of organizational justice with organizational citizenship behavior”, *Örgütsel Davranış Araştırmaları Dergisi*, Vol. 3 No. 2, pp. 1-9.

Ryan, J.J. (2002), “Work values and organizational citizenship behaviors: values that work for employees and organizations”, *Journal of Business and Psychology*, Vol. 17, pp. 123-132.

Schutte, N.S., Malouff, J.M., Bobik, C., Coston, T.D., Greeson, C., Jedlicka, C., Rhodes, E. and Wendorf, G. (2001), “Emotional intelligence and interpersonal relations”, *The Journal of Social Psychology*, Vol. 141 No. 4, pp. 523-536.

Thibaut, J. and Walker, L. (1975), “Procedural justice: a psychological analysis”, *Duke Law Journal 1977*, Vol. 6, pp. 1289-1296.

Tokgöz, E. and Seymen, O.A. (2013), “Örgütssel güven, örgütssel özdeşleşme ve örgütssel vatandaşlık davranış arasında ilişki: bir devlet hastanesinde araştırma”, *Öneri Dergisi*, Vol. 10 No. 39, pp. 61-76.

Wang, T. and Jiang, H. (2015), “The mediating effects of organizational and supervisor identification for interactional justice: the case of Sichuan civil servants in China”, *Public Personnel Management*, Vol. 44 No. 4, pp. 523-542.

Wang, K.Y. and Nayir, D.Z. (2010), “Procedural justice, participation and power distance Information sharing in Chinese firms”, *Management Research Review*, Vol. 33 No. 1, pp. 66-78.

Yıldırım, F. (2007), “İş doyumu ile örgütssel adalet ilişkisi”, *Ankara üniversitesi SBF Dergisi*, Vol. 62 No. 1, pp. 253-278.

Zeidner, M., Roberts, R.D. and Matthews, G. (2008), “The science of emotional intelligence: current consensus and controversies”, *European Psychologist*, Vol. 13 No. 1, pp. 64-78.

Zhu, Y., Liu, C., Guo, B., Zhao, L. and Lou, F. (2015), “The impact of emotional intelligence on work engagement of registered nurses: the mediating role of organisational justice”, *Journal of Clinical Nursing*, Vol. 24 Nos 15-16, pp. 2115-2124.

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