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The mediating role of organizational commitment in the collective efficacy-performance relationship

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Abstract. In recent years, human resources have become a central issue for senior executives in organizations as they try to increase the commitment and performance of their employees. The study aims to examine three of the most important employee attachments to the workplace, namely organizational commitment, collective efficacy and individual job performance, based on a multifocal research framework, while also investigating the mediating effect of organizational commitment. The methodological basis includes the foundations of organizational behavior and human resources management. The research data were obtained by the survey method with 171 respondents working for a port operator in Mersin, Turkey. The survey data obtained were evaluated on a 5-point Likert scale. Statistical calculations were performed in SPSS Statistics 24 software package. The research methods are quantitative and sociometric analysis; reliability and validity analysis were applied to the variables. The relationships between the variables were tested using the structural equation model. To assess the importance of the intermediary effect, the bias-corrected bootstrap method was used. Our findings have shown that collective efficacy has a positive effect on organizational commitment, and organizational commitment has a positive effect on performance. Organizational commitment was proved as having a mediating role in the effect of collective efficacy on individual job performance. The study highlights that employees need to be committed to their organizations, and the increase in performance should be triggered by giving place to collective work.

Keywords: human resources management; organizational commitment; collective efficacy; individual performance; Turkey.

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Влияние результата группы на производительность труда работника: роль приверженности организации

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Аннотация. Руководители организаций уделяют все более пристальное внимание вопросам управления человеческими ресурсами, повышения производительности труда и вовлеченности работников в деятельность организации. Статья посвящена анализу ключевых факторов, определяющих аффективную лояльность сотрудников к компании: организационной приверженности, результата группы и производительности отдельного работника. Исследуется также роль приверженности как медиатора взаимодействия двух других факторов. Методологию исследования составили основы теории организационного поведения и управления человеческими ресурсами. Применялись методы количественного и социометрического анализа, моделирования структурными уравнениями, а также анализ надежности и валидности переменных. Информационная база охватывает результаты анкетирования 171 служащего организации г. Мерсин (Турция). Оценка полученных ответов производилась с использованием 5-балльной шкалы Ликерта, статистические расчеты осуществлялись в программном пакете SPSS Statistics 24. Для проверки значимости медиативного влияния использовался бутстреп-метод с поправкой на систематическую погрешность. Установлена положительная связь между парами переменных «результат группы – организационная приверженность» и «организационная приверженность – производительность труда работника». Подтверждена гипотеза о медиативной роли приверженности работников компании в рамках взаимосвязи результатов группы и конкретного сотрудника. Сделан вывод о значимости личного отношения персонала к организации, а также особой роли коллективной работы в повышении результатов деятельности компании.

Ключевые слова: управление человеческими ресурсами; приверженность организации; результат группы; производительность труда; Турция.

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Individual commitment to a group effort – that is what makes a team work, a company work, a society work, a civilization work.

Vince Lombardi, American football coach

INTRODUCTION

Organizations that understand the role of human resources in achieving organizational goals in an effective and efficient manner want to connect their employees to the organization in order to cope with the increasing competitive conditions. Organizational commitment, which enables employees to participate in the business and enhance the performance of the organization in general, has become an issue that has gained importance in recent years. At the same time, the commitment of the employees strengthens their engagement in the business and can have a collective team spirit. In addition, employees with high organizational commitment establish good relations with other members of the enterprise and their job satisfaction levels are higher. Therefore, determining the organizational commitment of employees is a very important issue for organizations [Obeng, Ugboro, 2003]. Considering that 90% of the world trade is carried out by sea, maritime workers are also becoming more important for organizations. The maritime industry is very dynamic and fast-flowing. According to ITF data¹, the number of employees serving the transportation sector is 20 million. Although the concepts of employee engagement, individual performance, and collective efficacy, which have been frequently encountered in recent years, are new for maritime employees, they should be among the important concepts to be considered.

Today, the importance of maritime employees working in different areas of the maritime industry is increasing day by day. They are among the most important actors of this inseparable supply chain, from port to ship agency, from ship brokerage to marine insurance, from shipowners to freight brokers. In this case, one of the most basic and prominent functions of human resources management for the maritime sector is the selection of the right employee. It is not easy to find employees who will really adopt the goals of the organization and show the characteristics required by the determined job [Fındıkçı, 1999]. Affective commitment, defined as an employee's commitment to the organization and identification with the organization's goals and values [Meyer, Allen, 1984], has been found to be positively related to collective success [Allen, Meyer, 1990]. In parallel with the studies in the literature, it is assumed that beliefs in the effectiveness of a group will be positively related to the organizational commitment of group members [Pillai, Williams, 2004; Vandenberghe, Bentein, Stinglhamber, 2004; Walumbwa et al., 2004]. The literature on personal and situational predictors of affective commitment shows that relation-

¹ ITF. (2022). ITF Transport Outlook Project. <https://www.itfoecd.org/>.

ships between superiors and subordinates are strongly associated with collective efficacy. In addition, high collective efficacy is positively associated with an employee's commitment to an organization's goals, identification with its values, desire to achieve goals, and willingness to maintain membership [Mathieu, Zajac, 1990; Pillai, Williams, 2004; Walumbwa et al., 2004]. Little and Madigan's [1997] study explores the collective efficacy structure for self-directed work teams in a production setting. Collective efficacy and performance behaviours are measured over four time periods for eight study teams and a positive association is discovered. This suggests that higher collective efficacy is associated with higher performance levels. Borgogni et al. [2009] administer a questionnaire measuring collective efficacy, perceptions of context, and organizational commitment of an Italian city hall's employees. Structural equation models reveal that top management's perceptions show a stronger relationship with organizational collective efficacy, while employees' perceptions of their colleagues and direct superiors are associated with group-level collective efficacy. Group collective efficacy is found to have a stronger relationship with affective organizational commitment than organizational collective efficacy. Affective organizational commitment has also been explored as a correlate of collective efficacy. On the other hand, Pillai and William's [2004] study focuses on processes that can explain how transformational leadership affects outcomes in the context of a firefighter. Their study reveals that employees' self-efficacy perceptions and workgroup commitment play an important role in the relationship between transformational leadership and outcomes such as commitment and performance.

In the literature, studies on the organizational commitment, individual performance and collective efficacies of maritime employees with three concepts are very limited. As a result, in line with the fact that the workforce is one of the most important service inputs in maritime organizations that have an important place in the maritime sector, this study is carried out to examine the organizational commitment, individual performance and collective efficacies of the maritime business employees and the relationship between them.

THEORETICAL BACKGROUND

Collective efficacy & Organizational commitment. In the literature, it is seen that various definitions have been made regarding the concept of commitment. According to the definition, organizational commitment is an individual's partial and effective commitment to the goals and values of their organization. A high level of organizational commitment is a desired and sought-after feature in employees [Aven, Parker, McEvoy, 1993]. A committed employee strongly believes in the goals and values of the organization and obeys orders and expectations wholeheartedly. Organizational commitment reflects the

degree of identification of the individual with the organization from different aspects [Reichers, 1985]. Organizational commitment, which expresses the psychological attachment of the employee to the workplace, can also be defined as the desire of the employee to stay in the organization, to strive for it and adopt its goals and values [Morrow, 1983]. From this viewpoint, organizational commitment is viewed as an important factor affecting the performance and collective efficacy perceptions of employees. Walumbwa et al. [2004] conducted a study of 402 employees from the banking and finance industries in China and India. They found that collective efficacy mediated the contribution of transformational leadership to work and turnover, and partially mediated the contribution of transformational leadership to organizational commitment and job satisfaction. Chen, Zhou and Klyver [2019], in a study they conduct on 238 employees of 52 teams in manufacturing companies in China, found that team commitment negatively regulated the relationship between moral leadership and collective efficacy, and positively regulated the relationship between collective efficacy and organizational commitment. Kang and Kim [2014] investigate the relationships between self-efficacy, collective efficacy, job satisfaction, and organizational commitment of nurses working in general hospitals in South Korea. The results reveal that all the four variables showed significant positive correlations. Wombacher and Felfe [2017] estimated that organizational commitment enhances and improves each other's goal-specific effects on team- and organization-directed organizational citizenship behavior, efficacy beliefs, and turnover intentions. Ware and Kitsantas [2007], in their study on teachers in the USA, try to determine whether teaching and collective efficacy beliefs predict commitment to the teaching profession. The findings support the hypothesis that the scales significantly predicted teacher professional commitment. Given the teacher turnover rate, the current findings are important for teachers to stay in the profession. On the other hand, Ali [2016] examines the relationship of internal marketing variables in achieving employee satisfaction and organizational commitment in a maritime academy. The results of the data analysis show that all the variables examined have an effect on job satisfaction, while job satisfaction also has an effect on organizational commitment. In summary, this study aims to address the collective efficacy, performance and organizational commitment perceptions of maritime employees working in the maritime industry. Depending on these studies, the author formulates the first hypothesis as:

H1: Collective efficacy has a positive effect on organizational commitment.

Organizational commitment & Performance. Various studies have been carried out in different fields in order to determine the relationship between organizational commitment and employee performance. It is also found that the results of these studies can vary. Some of these stud-

ies emphasize that the relationship between organizational commitment and job performance is not very clear. Others have pointed out that the relationship in this area is associated with the change in the level of commitment [Steers, 1977; Wiener, Vardi, 1980]. Samnani and Sing [2014] determine that the practices made to improve the performance of the employees increase their productivity by strengthening their motivation and commitment. Zefeiti and Mohamad [2017] state that all dimensions of organizational commitment are positively related to the job performance of the employees and contribute to the increase of their performance. On the other hand, it is stated that if it becomes very difficult to achieve the goals, there is a significant decrease in commitment and as a result, a decrease in performance occurs. It is not possible to say that all employees are subject to the same conditions and practices in organizations. Therefore, it is normal to encounter different results [Balay, 2000]. According to Chen and Francesco [2003], managers can increase employee performance by understanding and managing the employee's commitment to their organization. Khan et al. [2010] find that all three dimensions of organizational commitment significantly affect employee performance in both the public and private sectors. Memari, Mahdiah and Marnani [2013] reveal that employee performance emerges as a determinant of organizational commitment. As Meyer and Allen [1997] noted, a single study probably cannot examine all possible forms of commitment because such a study would have to include multiple forms of attachment to several different components. Yiing and Ahmad [2009] have investigated the moderating effects of organizational culture on the relationships between leadership behaviour and organizational commitment and between organizational commitment and job satisfaction and performance of MBA students and research assistants in Malaysia. Organizational commitment is found to be significantly associated with job satisfaction, but not with employee performance. However, it is revealed that only supportive culture affected the relationship between commitment and satisfaction. Tabouli, Habtoor and Nashief [2016] examine the impact of human resource management policies of a bank in Libya on organizational commitment and employee performance. It has been determined that there is a positive relationship between human resource management and employee performance. At the end of the study, the researchers recommended that human resource management place more emphasis on employee-related policies and practices that lead to improved employee performance.

Aydoğan and Arslan [2020] aim to examine the relationship between human resources management (HRM) application packages and organizational commitment through the questionnaires they apply to 104 employees of international maritime enterprises. They also reach out to find answers to the question of which of these packages contributes to the performance and loyalty of the

employees according to their demographic characteristics in the maritime market. Moderate positive and negative linear relationships are found between HRM practices and organizational commitment. In addition, significant differences are found between employees' organizational commitment levels and their perceptions of the impact of HRM practices on their performance. As a result of his study on 726 seafarers in [Yorulmaz, 2019], it was determined that job satisfaction and organizational citizenship behaviour, which have significant relationships, positively affect individual job performance and that organizational citizenship behaviour has a partial mediating effect on the relationship between job satisfaction and job performance. On the other hand, it has been determined that there are statistically significant differences in organizational citizenship behaviours and job performance between deck, machinery and auxiliary servant class seafarers. According to Yorulmaz, Mansuroğlu and Kaya [2020], organizational identification has both a direct and indirect effect on organizational commitment through job satisfaction. In addition, this study revealed that organizational identification together with job satisfaction explains 0.59% of the change in organizational commitment. In line with this information, H2 is given below:

H2: Organizational commitment has a positive effect on performance.

Collective efficacy & Performance. In many studies, it has been observed that collective efficacy is measured by work outcomes [Walumbwa et al., 2004; Carroll, Rosson, Zhou, 2005; Zellars et al., 2001]. Bandura [1993] introduced the concept of collective efficacy more than three decades ago and stated that the concept has powerful implications for people's learning, job performance, and motivation. Lee [1992] investigates the relationship between efficacy and performance at three levels of analysis of the individual, supervisor-subordinate pairs, and workgroups. Lee finds that group efficacy differs from self-efficacy and is positively related to group members' perceptions of their performance. Salanova et al. [2003] investigate the effects of e-groups on well-being and performance using an aggregated approach and an objective performance indicator. It also includes anxiety as well as collective efficacy as a moderator and positive well-being. The results confirm the moderating role of perceived collective efficacy on well-being and task performance. Zaccaro et al. [1992] find that perceptions of collective efficacy are related to the amount of individual effort planned for a subsequent idea generation task in laboratory groups. On the other hand, Kane et al. [1993] find that perceived collective efficacy is related to team goals in a wrestling tournament, team goals for the next season, and team performance standards, norms, and expectations. Taken together, these studies show that collective efficacy supports the impact on individual and team performance processes [Zaccaro et al., 1995]. Hsieh et al. [2012] examine the effect of work characteristics on employees' self-

efficacy and collective efficacy, and subsequently on the performance of police officers. In their study, the authors show that work characteristics affect members' self-efficacy and collective efficacy, which in turn affect individual and group-level performance and the contextual effect of social work characteristics and collective efficacy on self-efficacy and individual performance. Team psychological safety (TPS) is the shared belief that people feel safe about the interpersonal risks that arise regarding their behaviour in a team context [Edmondson, 2018]. Team psychological safety appears to have a significant impact on team behaviour and goal orientation. It also improves performance while influencing the collective efficacy of a team [Roussin, MacLean, Rudolph, 2016]. Hence, we formulate the third hypothesis as:

H3: Organizational commitment has a mediating role in the effect of collective efficacy on performance.

MATERIALS AND METHODS

Collective efficacy, Performance & Organizational commitment. The study consists of two parts. In the first part, the demographic characteristics of the participants are measured. In the second one, the following scales of maritime employees' collective efficacy, individual performance and organizational commitment are used. *The Collective Efficacy Scale* (7 items) was developed by Riggs et al. [1994] in order to measure the individual's belief in the efficacy capacity of the group s/he is a member of. It consists of a total of seven items and has a single dimension. While Riggs et al. [1994] define the scale, they state that this scale can be applied in every sector that requires working together (office, academic study groups, etc.). *The Individual Performance Scale* (4 items), on the other hand, was developed by Kirkman and Rosen [1999] to measure individual job performance, and a scale consisting of four items and one dimension is used. For this reason, this scale, which can be measured reliably with a small number of questions, is preferred to measure the perception of performance. Finally, the *Organizational Commitment Scale* (3 items) is used by Kiewitz et al. [2002] and the scale used by Tsui et al. [1997] to measure the organizational commitment levels of employees. The scale measures the general organizational commitment levels of the employees with three items and one dimension. For this reason, this scale, which can be measured reliably with a small number of questions, is preferred to measure organizational commitment. All scales are evaluated on a 5-point Likert scale, with scores ranging from 1 (totally disagree) to 5 (totally agree). The scales used within the research are shown in Table 1.

Participants and procedure. The research includes a sample of employees working for a port terminal in Mersin, Turkey. Collective efficacy, performance and organizational commitment online questionnaires are administered on a voluntary basis. Management, marketing, business, operations, technical, maritime, logis-

Table 1 – Research variables measuring scales
Таблица 1 – Шкалы измерения переменных исследования

Variables	Measures		Adapted
Collective efficacy	CE1	The skills of my department/unit colleagues I work with are above average	Riggs et al. [1994]
	CE2	Some employees in my unit/department are not doing well	
	CE3	Some of my department/unit mates should be expelled from the department/unit due to their lack of business skills	
	CE4	The unit/partition I am working in is not good enough	
Performance	P1	I complete my work on time	Kirkman, Rosen [1999]
	P2	I achieve or exceed my goals	
	P3	When a problem arises, I solve it quickly	
	P4	I definitely provide services at or above quality standards	
Organizational commitment	OC1	I am proud to tell others that I am a part of my organization	Tsui et al. [1997]
	OC2	This business is the best business for me to work for	
	OC3	I proudly express to my friends that this workplace is the perfect place to work	

tics, accounting and field employees of the organization completed the questionnaire. Of all the surveys given to the port employees, 171 were returned with answers. According to the completed questionnaires, 57.3% of respondents are married, 42.7% are single, 69.6% are males and 30.4% are females; 24.0% held logistics expert positions, 9.9% are clerks, 35.1% are experts, 24.6% are managers, and 7.0% are top executives. The majority (33.9%) of these employees have been working for the maritime sector for one to five years and 63.7% of them are university graduates. The study meets the minimum sample size criterion ($n > 50 + 8m$) [Tabachnick, Fidell, 2007]. Employees complete the questionnaire anonymously on the job within a month. Socio-demographic characteristics of the maritime employees who participated in the study are given in Table 2.

ANALYSIS OF RESEARCH DATA

Reliability and validity analyses of the research scales. The data is entered into the IBM SPSS Statistics 24 package program. The descriptive analysis is used. First, exploratory factor analysis is carried out using varimax rotation. It is then put to the test using confirmatory factor analysis. Because the model is simple and the data is normally distributed, CB-SEM is used [Hair et al., 2017]. To examine structural relationships, the IBM SPSS AMOS 21 package program is used. First, descriptive analysis of mean, standard deviation, skewness, and kurtosis is used [Huang, Lee, Ho, 2004]. Table 3 below displays the results of the normality test.

Skewness and kurtosis values, which range between -1.5 and +1.5, indicate whether the research data is nor-

Table 2 – Socio-demographic characteristics of respondents
Таблица 2 – Социально-демографические характеристики респондентов

Experience (years)	N	%	Age	N	%
0–12	10	5.8	18–24	17	9.9
1–5	58	33.9	25–34	81	47.4
6–10	40	23.4	35–44	54	31.6
11–15	29	17.0	45–54	18	10.5
16+	34	19.9	55+	1	0.6
Position	N	%	Gender	N	%
Expert	60	35.1	Female	52	30.4
Technician	5	2.9	Male	119	69.6
Chief	17	9.9	Education	N	%
Office clerk	20	11.7	High school	6	3.5
Assistant manager	8	4.7	Vocational school	17	9.9
Manager	42	24.6	University	109	63.7
Accountant	1	0.6	Post-graduate degree	37	21.6
Other	18	10.5	Total	171	100
Total	171	100			

Table 3 – Normality test results
Таблица 3 – Результаты теста на нормальность модели

Question	Mean	Std. deviation	Skewness	Kurtosis
CE1	3.88	.919	-.868	.711
CE2	3.45	1.194	-.133	-1.196
CE3	3.63	1.255	-.357	-1.189
CE4	4.08	1.068	-.944	-.045
P1	4.27	.805	-1.020	.642
P2	4.09	.796	-1.080	1.747
P3	4.22	.810	-1.302	2.520
P4	4.02	.854	-.848	.662
OC1	4.20	.939	-1.154	.887
OC2	3.87	.945	-.573	-.133
OC3	3.95	.922	-.624	-.176

mally distributed. These values indicate that the data is distributed normally [Byrne, 2010]. The data is then subjected to a reliability analysis. The general Cronbach's alpha (CA) [Cortina, 1993] is found to be 0.850, indicating the internal consistency of the scales. The scale items with factor loadings less than 0.50 (CE1) are eliminated as a result of the analysis [Hair et al., 2016]. Following analyses are carried out on the remaining scale items. As a result, the scales' overall CA is determined to be 0.850. It is possible to say that the scales used in this research are reliable depending on the alpha coefficient. The scales' validity is assessed using explanatory factor analysis.

In Table 4, the results of the validity and reliability tests are found.

The Kaiser [1974]-Meyer Olkin (KMO) test assesses sampling adequacy for each model variable and the entire model. It returns values ranging from 0 to 1. If the KMO value is between 0.8 and 1, then the sampling is adequate.

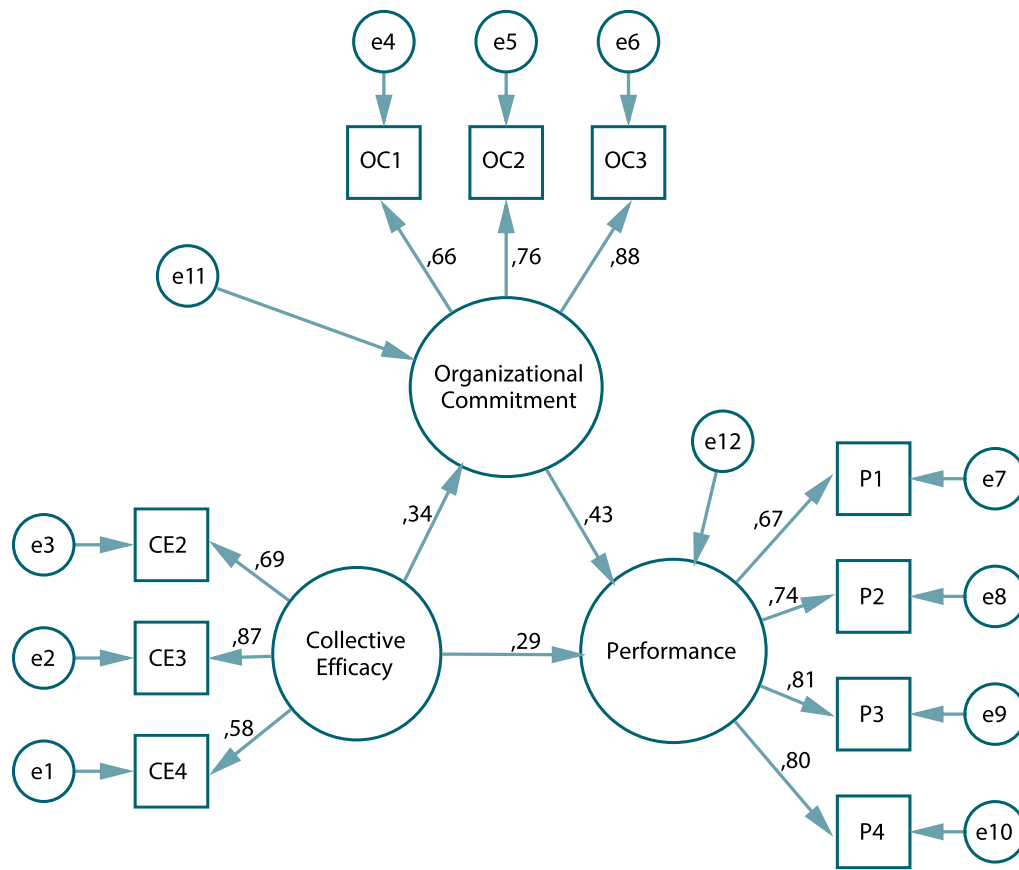
The KMO value in this study is 0.833, which indicates that it is very satisfactory [Kaiser, 1974]. Each variable in the study has a total eigenvalue greater than 1.0, and they are all categorized under one factor. The total number of variations exceeds 70%. The factor load on each scale in this research is 0.50 and above. Taking all of these factors into account, it is determined that the structural equity model can be used in this research [Hair et al., 2010].

RESULTS OF STRUCTURAL MODEL AND HYPOTHESIS TESTS

Structural equation modelling is a method that is successful in testing complex models, makes many analyses at once, recommends new arrangements, if any, for the network of relations in the model under investigation, and facilitates the examination of mediation and moderation effects. In addition, since it takes measurement errors into account, the structural equation modelling method is a method used in testing many theories and in the development of new models [Viswesvaran, Ones, 1995]. To minimize model errors, structural equation modelling (SEM) can be evaluated. Furthermore, it enables the discovery of relationships between variables. As a result, this method facilitates the modelling of structures at a higher level [Hair, Gabriel, Patel, 2014]. The general suitability of SEM with conceptual models and hypotheses is investigated in this study. As a result, a structural equity modelling test is performed using the AMOS 22.0 program to present the relationships between the variables. The objective is to examine the hypotheses proposed in the research and to develop a structural model, as shown in Figure. The structural model and fit indices are presented in Figure and Table 5. As can be seen from Table 5, χ^2/df : 2.381 and model fit indices are among the recommended levels. Therefore, it can be said that the model fits the data well [Byrne, 2010; Hair et al., 2010; Tehci, 2022].

Table 4 – The results of the validity and reliability tests
Таблица 4 – Результаты тестов на валидность и надежность модели

Variable	Question	Factor Load	Eigen Value	Variance, %	Cronbach's Alpha
Performance	P1	0.654	4.621	42.009	0.837
	P2	0.737			
	P3	0.860			
	P4	0.839			
Organizational Commitment	OC1	0.630	1.458	55.265	0.800
	OC2	0.865			
	OC3	0.871			
Collective Efficacy	CE2	0.842	1.275	66.855	0.745
	CE3	0.865			
	CE4	0.619			
Kaiser Meyer Olkin (KMO)	-	-	0.833		
Bartlett's Test of Sphericity	-	-	Approx. Chi-Square: 764.834 df: 55 Sig: 0.000		



Structural research model

Структурная модель исследования

As it is observed in Figure, collective efficacy has a positive effect on organizational commitment; organizational commitment has a positive effect on performance; and organizational commitment has a mediating role in the effect of collective efficacy on performance.

Goodness-of-fit values. To assess the importance of the structural model as a whole, the goodness-of-fit values for the structural model need to be considered. The goodness-of-fit values are examined to demonstrate the model's validity. The measured values are given in Table 5. There should be no disparity between measured values and theoretical limits for the structural equity model to be consistent with the data. In this research, chi-squared goodness-of-fit criterion, which is expected to be below 5 and close to 0, is $\chi^2/df = 2381$, which means it has a good value, and the values of chi-squared goodness-of-fit criterion for the whole structured model are RMSEA = 0.090, TLI = 0.907, CFI = 0.934 and IFI = 0.935 within acceptable

values [Hair et al., 2010]. As a result, it is demonstrated that the data in the research model concerning the relationships is coherent with the sample. It is also evidenced that the model as a whole is valid.

RMSEA is root mean square of approximation error, CFI is comparative goodness-of-fit index, GFI is goodness-of-fit index, AGFI is adjusted goodness-of-fit index, IFI is incremental goodness-of-fit index, NFI is normed fit index, TLI is Tucker–Lewis index.

ANALYSIS OF HYPOTHESIS TEST RESULTS

The results of the regression coefficient analysis that is made to evaluate the hypotheses put forward in this research are shown in Table 6. As seen from Table 6, collective efficacy variable has a low effect on organizational commitment ($R = 0.341$), organizational commitment has a high effect on performance ($R = 0.435$).

Table 5 – Research model Goodness-of-Fit Indices (GFI)

Таблица 5 – Значение индексов подгонки (GFI) исследуемой модели

P	χ^2	χ^2/df	RMSEA	CFI	IFI	TLI
0.000	76.177	2.381	0.090	0.934	0.935	0.907

Note: χ^2 is chi-squared value, DF is degree of freedom, RMSEA is root mean square of approximation error, CFI is comparative goodness-of-fit index, GFI is goodness-of-fit index, AGFI is adjusted goodness-of-fit index, IFI is incremental goodness-of-fit index, NFI is normed fit index, TLI is Tucker–Lewis index.

Organizational commitment is the most significant effective variable on performance while collective efficacy has a significant but low effect on organizational commitment. According to the results of the analysis, collective efficacy has a positive effect on organizational commitment; organizational commitment has a positive effect on performance; and organizational commitment has a mediating role in the effect of collective efficacy on performance. That is, the analysis results show that all the hypotheses formulated in the research are approved. This result is similar to the result of the study conducted with Italian city hall officers by Borgogni et al. [2009], which found a positive effect of collective efficacy on organizational commitment. Also, the findings of the research conducted with Indonesian civil servants by Suharto and Hendri [2019] reveal a positive correlation between organizational commitment and job performance.

Mediation analysis. The mediating effect of organizational commitment on the performance of employees has been expressed in previous studies [Dhar, 2015; Suliman, 2002, Samgnanakkan, 2010; Lim, Loo, Lee, 2017; Gomes, 2009]. Therefore, in this research, the mediating effect of organizational commitment on the relationship between collective efficacy and performance is tested. To assess the importance of the intermediary effect, the bias-corrected (BC) bootstrap method [MacKinnon, Lockwood, Williams, 2004] is used in the structural equation model literature [Tehci, Senbursa, 2023]. To discuss the mediation effect, the variables in question must first have a direct effect (Table 7). This effect is expected to decrease or disappear when the mediator variable is included in the model (see Figure). Table 7 shows results based on mediation analysis of 2000 bootstrap samples. As a result, organizational commitment has a mediating role in the effect of collective efficacy on performance. Thus, *H3 is supported*.

Thus, as we can see, all the three hypotheses proposed in the study have been accepted.

DISCUSSION

In the literature, the relationship between organizational commitment, collective efficacy and employee performance is examined in different sectors. However, there is lack of studies investigating the mediating effect of organizational commitment in the relationship between performance and collective efficacy. Studies that concentrate on the relationship between performance and collective efficacy are encountered [Fuster-Parra et al., 2015; Myers, Paiement, Feltz, 2007; Hodges, Carron, 1992]. According to the research of Hodges and Carron [1992] on female and male athletes, high collective efficacy improved their performance following failure. In the research of Myers, Paiement and Feltz [2007] conducted on women's ice hockey team it is revealed that at each of the three additive team performance intervals, collective efficacy based on summative team performance capabilities is a statistically significant predictor of team performance. For example, Fuster-Parra et al. [2015] analyse team performance and collective efficacy by discovering the relationships between 22 relevant psychological features in semi-professional football players. The findings show that when a team's performance reaches the minimum value, the moderate/high values of collective efficacy increase. Donkor, Dongmei and Sekyere [2021], on the other hand, find that organizational commitment mediates transformational and laissez-faire leadership. In their research conducted with the manufacturing sector's employees, Yeh and Hong [2012] find that there is the mediating effect of organizational commitment on leadership type and job performance. According to the findings of the study Suliman [2002], organizational commitment and its two components (normative and continuance commitment) have various roles in mediating the relationship between perceived work climate and performance since evaluated by employees and their immediate supervisors. Ozdemir, Senbursa and Tehci [2022] find that positive or-

Table 6 – Hypothesis test results
Таблица 6 – Результаты тестирования гипотез

Hypothesis	Direction	Standardized Effect	Standard Error	P-value	Result
H1	Organizational Commitment ← Collective Efficacy	0.341	0.102	0.000	Accepted
H2	Performance ← Organizational Commitment	0.435	0.087	0.000	Accepted

Table 7 – Mediation test result
Таблица 7 – Результаты теста на медиацию

Direction		Standardized Effect		Standard Error	P-value	Result	
H3	P ← CE		0.427		0.091	0.000	Accepted
	Variables	Standardized Indirect Effect	Lower Bounds	Upper Bounds	Two-tailed Significance	Mediation $p < 0.05$	
	CE – P OC (Mediator)	0.148	0.068	0.313	0.004	Partial	

ganizational justice perceptions of seafarers have a significant effect on their organizational commitment and job satisfaction levels, which in this study will be referred to as employee satisfaction levels of seafarers. It has also been discovered that seafarers' employee satisfaction has a positive effect on their organizational commitment. Tourigny et al. [2013] conduct research on hospital nurses. The findings reveal that there is a complete mediation effect for turnover intention and organizational citizenship behaviour directed at the organization. There is no mediation effect for task performance and a significant indirect effect for organizational citizenship behaviour directed at individuals. Rantesalu et al. [2017] analyse the impact of organizational commitment and employee performance on efficacy, motivation, and organizational culture among employees of an educational institute. The findings show that employee performance is positively influenced by efficacy, organizational culture, and organizational commitment. In explaining the effect of work motivation on employee performance, organizational commitment acts as a moderating variable. On the other hand, Almaaitah et al. [2020] investigate the impacts of human resource talent management on organizational performance improvement. The results show a positive effect of talent management on organizational performance, effective continuance, and normative commitment. It is also demonstrated that effective continuance and normative commitment played a mediating role. Another set of findings explicitly shows that the influence of organizational commitment, as a mediating variable in the aforementioned relationship, improves understanding of the relationship between mission statements and organizational performance [Macedo, Pinho, Silva, 2016]. Silva, Moreira and Mota [2023] conduct research on employees belonging to the construction industry. The findings indicate that the relationship between employees' perception of CSR and their performance is mediated by job satisfaction and organizational trust. In conclusion, the research results of Osei, Osei-Kwame, Osei Amaniampong [2017] reveal that nurses' commitment mediated the relationship between individual mechanisms which are trust, ethics, and justice of nurses and their level of work self-efficacy. The studies mentioned above seem to support this study.

CONCLUSION

In recent years, since employees have gained a lot of importance, organizational commitment has become a critical point in increasing performance and perceiving collective efficacy. To support the emotional commitment of employees, organizations need to establish a strong, specific cultural foundation to achieve truly high levels of employee engagement. It is necessary to mention the importance of employees having an inner need, motivation and desire for meaningful and purposeful work. Organizations that enable the experience of purpose at workplace inspire their employees to be more engaged, motivated and fulfilling, because having a sense of purpose for the work done today is more important than ever. For this reason, managers need to regularly show their employees how their work benefits others, and it is necessary to make the goals of contributing to a business more important than the goals of success. This is possible with the rise of collective efficacy perception. Employees can be assigned to more collective works or projects by their executives. With the idea of "Teamwork makes the dream work", the performance of employees has been marked to increase. It has been observed that this is reflected in the performance of the employees. The role and importance of organizational commitment in the relationship of collective efficacy perception to performance should not be forgotten. It should be made clear that the employees need to be committed to their organizations, and the increase in performance should be triggered by giving place to collective work.

Limitations & future research. While the present study makes several contributions to the existing literature, its limitations need to be noted. First, the causality between them can be questioned, as data on the three concepts are collected at the same time. Second, we recognize that our findings may not be generalizable to other maritime organizations and maritime foreign companies. The findings in this paper are based on port employees' samples. Other organizations in Turkey might have a different organizational commitment climate. In this research, only quantitative methods have been applied. Therefore, for future studies, it is recommended that different samples and methods be applied. Thus, the author believes further longitudinal research is needed to shed light on the dynamics and causality of these relationships. ■

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