



## MEDIATING EFFECT OF ORGANIZATIONAL STRUCTURE ON THE EFFECT OF TEAMWORK ATTITUDE ON TEAM PERFORMANCE

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### Abstract

*The behavioral processes in which people manage independent work, and/or the affective, cognitive, and motivative states emerging during working are usually dedicated to “teamwork”. Behavioral processes involve actions like communication, coordination, expertise sharing, and help. Emergent states involved, ie., mutual respect and psychological safety. Organizational structure is defined as the formal system for duty and authority relationships controlling the way that individuals coordinate their actions and use resources to accomplish the goals of an organization that the job was changed from individual-oriented to collaborative approaches, in that case, teams were assumed to be the milestone of the structure for the organization. This study aims to examine the mediating effect of organizational structure on the effect of attitudes towards teamwork and its sub-dimensions (Team Structure, Leadership, Situation Monitoring, Mutual Support, Communication) on team performance. In this context, data were collected from 115 employees working at Fethi Sekin City Hospital in Elazığ, by survey method. “Teamwork Attitudes Scale”, “Teamwork Performance”, and “Organizational Structure scale” were used as data collection tools. The research was tested by using Process software. In the study, the Pearson correlation test, Process Regression analysis was used as one of the test techniques. As a result of the research, the effect of team structure, which is one of the sub-dimensions of teamwork attitudes, on team performance is mediated by the organic organizational structure. In addition, the effect of mutual support and communication, which are sub-dimensions of teamwork attitudes, on team performance is mediated by the organic organizational structure.*

**Keywords:** Teamwork attitudes, Teamwork performance, Organizational structure.

**Jel Codes:** M12, M19

### Ekip Çalışması Tutumlarının Ekip Performansına Etkisinde Örgüt Yapısının Aracılık Etkisi

#### Öz

*İnsanların bağımsız çalışmayı yönettikleri davranışsal süreçler ve/veya çalışma sırasında ortaya çıkan duyuşsal, bilişsel ve motive edici durumlar genellikle “ekip çalışmasına” adanmıştır. Davranışsal süreçler, iletişim, koordinasyon, uzmanlık paylaşımı ve yardım gibi eylemleri içerir. Acil durumlar, yani karşılıklı saygı ve psikolojik güvenliği içerir. Örgütsel yapı, bir örgütün amaçlarına ulaşmak için bireylerin eylemlerini koordine etme ve kaynakları kullanma şeklini kontrol eden görev ve yetki ilişkileri için resmi sistem olarak tanımlanmaktadır. Bu durumda ekiplerin organizasyon yapısının kilometre taşı olduğu varsayılmıştır. Bu çalışmanın amacı ekip çalışmasına yönelik tutumların ve alt boyutlarının (Ekip Yapısı, Liderlik, Durum İzleme, Karşılıklı Destek, İletişim) ekip performansı üzerindeki etkisinde örgüt yapısının aracılık etkisinin incelenmesidir. Bu kapsamda, Elazığ ili Fethi Sekin Şehir Hastanesinde görev yapan 115 çalışanından anket yöntemiyle veri toplanmıştır. Veri toplama araçları olarak “Ekip Çalışması Tutumları Ölçeği”, “Ekip Çalışması Performansı”, “Organizasyon Yapısı Ölçeği” kullanılmıştır. Araştırma, Process yazılımı kullanılarak test edilmiştir. Çalışmada test tekniklerinden biri olan Pearson korelasyon testi, Process Regresyon analizi kullanılmıştır. Araştırmanın sonucunda ekip çalışması tutumlarının alt boyutlarından biri olan ekip yapısının ekip performansı üzerindeki etkisine organik organizasyon yapısı aracılık etmektedir. Ayrıca, ekip çalışması tutumlarının alt boyutlarından olan karşılıklı destek ve iletişimin ekip performansı üzerindeki etkisine organik organizasyon yapısı aracılık etmektedir.*

**Anahtar Kelimeler:** Ekip çalışması tutumları, Ekip çalışması performansı, Organizasyon yapısı.

**Jel Kodları:** M12, M19

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## 1. Introduction

As known, effective teamwork ensures efficient problem-solving and decision-making in a patient's care and treatment process, the recommended solutions are accepted mostly, provide more data on the patient, empower the decision-making processes of the patient a self-care, offer more solution alternatives about the current problems, enhances the opportunity for the solution of hard-to-solve problems knowledge and skill, eases the individual's self-expression, minimizes cost and ensures patient safety (Tüney, 2019). The fact that healthcare professionals could work feeling team spirit is significant. The skills of cooperation, collaboration, and teamwork of healthcare professionals are necessary to be developed. Due to the structural features of hospitals, teamwork is inevitable. This requirement is because of the structural features of hospitals. Hospitals are complex organizations and they are far more complex than other organizations of similar sizes. Also, Hospitals are matrix organizational structures. For this reason, for the effective work of members of the healthcare team, the working environment is crucial. This working environment needs to let constructive human relations, open-mindedness and flexibility, mutual respect, participatory governance, free expression and discussion of opinions, personal and professional confidence, and demonstration of unique professional skills (Türe Yılmaz & Yıldırım, 2018), within this scope, is to examine the mediating effect of organizational structure on the effect of teamwork attitudes on team performance.

## 2. Research's Variables

### 2.1. Teamwork attitude, Team performance, Organizational structure

Team-based performance evaluation systems are used to dispose of the elements preventing the success of the team through seeing the strengths and weaknesses of the team. In this manner, eliminating the factors that prevent the achievement of the target performance by continuously evaluating the performance of the organization is possible (Güzel, 2016). Herein, a relationship is settled between the organizational structuring and performance level which is determined. Every organization has a structure and organizational performance is also affected by this structure, just like the behavior of individuals within the organization. Organizational structure is a system of formal duties and authority relationships that coordinate operational functions and control the use of resources to accomplish organizational goals (Jones, 2017). For this reason, organizational structuring will play a significant role in the achievement of the targeted performance on both a business unit basis and an organizational basis (Dalton et al., 1980, cited: Demir & Okan, 2009). Organic structures are structures that do not centralize authority and encourage flexibility (Erkocaoğlu & Özgen, 2009), in this way, people can take the initiative to start change and adapt quickly to changing conditions. As decision-making power is distributed in organic structures, people have decision-making authority that is aligned with organizational needs.

As roles are defined in general terms and employees constantly develop new job skills due to frequently changing duties (Jones, 2017), worker flexibility becomes crucial. One practical issue of importance is the impact of multifunctionality and its distribution among team members on group performance. For instance, large-scale studies of workers' skills and qualifications have shown that a moderate increase in functional flexibility improves team performance (Molleman & Slomp, 1999). In Güzel's (2016) study on the effect of ego (individualist-collectivist-relational) variables on the relationship between collective leadership and team performance, an important relationship was found between the collective leadership understanding of health personnel and team performance. Similarly, relationships were identified between collective leadership and ego, as well as team performance and ego.

Additionally, it was found in Erkan's study (2002) that football players playing in the clubs in the Turkish First Professional Football Super League had unhealthy communication problems between athletes-coaches, athletes-athletes, as well as athletes-managers, and that such problems mostly originated from club managers, athletes, and their coaches. In this way, they longed to establish open communication with their managers. Similarly, Çiftçi's (2020) study showed that colleague solidarity and teamwork have a positive effect on nurses' attitudes toward teamwork. In Tata and Prasad's (2004) research, the links between organizational structure, team self-management, and team effectiveness judgments were evaluated, and it was revealed that contextual variables such as organizational structure can impact team effectiveness. Moreover, Otache's (2019) study investigated the mediating effect of teamwork on the relationship between strategic orientation and organizational performance, and found a positive relationship between strategic orientation and organizational performance, as well as between strategic orientation and teamwork.

Otache (2019) concluded that teamwork fully mediates the relationship between strategic orientation and organizational performance, showing a significant positive correlation between teamwork and organizational performance. In Körner et al.'s (2016) study, it was discovered that there were differences in information integration among professionals within healthcare teams, and the extent of knowledge integration explained teamwork and team performance perceptions, as well as the mediating effect of teamwork. Similarly, McEwan et al.'s (2017) systematic review and meta-analysis found that teamwork interventions had positive and significant medium-scale effects on both teamwork and team performance. Al-Rawi's (2008) research explored the nature and function of teamwork cohesion in organizations in the UAE, revealing a strong relationship between teamwork commitment and the attitudes of team members toward the organization. Additionally, Liu and Wang's (2020) analysis of team performance improvement from the perspective of social cognitive theory highlighted the important role of teamwork processes in enabling members to understand the team's mission, goals, and strategies. Based on this perspective, the following hypotheses are tested.

H<sub>1</sub>: The organic organizational structure mediates the effect of team structure on team performance, one of the sub-dimensions of teamwork attitudes.

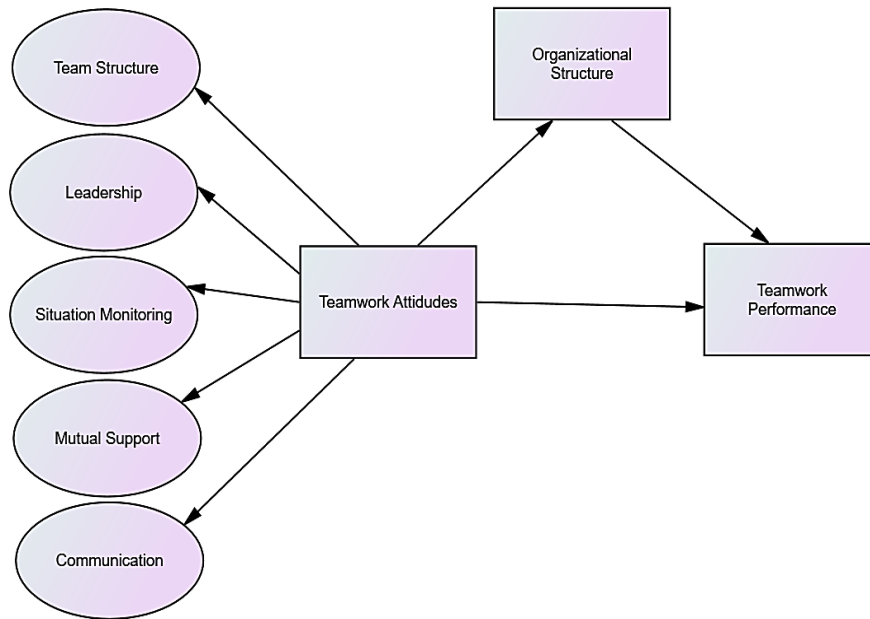
H<sub>2</sub>: The organic organizational structure mediates the effect of leadership on team performance, one of the sub-dimensions of teamwork attitudes.

H<sub>3</sub>: The organic organizational structure mediates the effect of situation monitoring, which is one of the sub-dimensions of teamwork attitudes, on team performance.

H<sub>4</sub>: The organic organizational structure mediates the effect of mutual support, which is one of the sub-dimensions of teamwork attitudes, on team performance.

H<sub>5</sub>: The organic organizational structure mediates the effect of communication, which is one of the sub-dimensions of teamwork attitudes, on team performance.

H<sub>6</sub>: The organic organizational structure mediates the effect of teamwork attitude on team performance.



**Figure 1.** Model of the study

### 3. Research Methodology

#### 3.1. Purpose of the Research

This study aims to investigate the mediating effect of organizational structure on the effect of teamwork attitudes on team performance. The research was tested by using Process software. In the study, the Pearson correlation test, Process Regression analysis was used as one of the test techniques. The sample size in this study is 115. Pearson correlation test is a test technique used to determine the direction and degree of a linear relationship between two independent quantitative variables. In the study, DFA analysis was performed with the AMOS 21.0 program, and factor structures were examined.

#### 3.2. Scales of the Study

Teamwork Team Scale (TTS) provides an assessment of teamwork in healthcare institutions that aim to improve patient safety. The scale includes 28 questions, including team structure, leadership, situation monitoring, mutual support, and attitudes towards communication sub-dimensions, which are the basic components of teamwork (Tüney, 2019). The high score obtained from the scale indicates a positive attitude towards teamwork.

#### 3.3. Team Performance

The team performance scale was created by Hoevemeyer in 1993 (Güzel, 2016). This scale consists of 20 expressions and 5 sub-dimensions (1. Positive roles and norms, 2. Team mission, 3. Accessing the goal, 4. Strengthening, 5. Open and honest communication) occurs. A 5-point Likert-type scale (1 = Strongly Disagree, 5 = Strongly Agree) is used here. In the study, the scale was taken as one dimension.

#### 3.4. Organizational Structure

The instrument prepared by Covin et al. (2001: 65) measuring the organizational structure in two dimensions, mechanical and organic, and with 14 statements was preferred (Çoban Kumbalı, 2018). Only organic organizational structure was used in the study.

### 3.5. Research Ethics

This study is an original study conducted to determine the mediating effect of the organizational structure in the effect of teamwork attitudes on team performance and it was acted following the principles of publication ethics during the research process. Necessary permissions for the realization of the research were obtained from Munzur University Non-Interventional Research Ethics Committee with the decision number 2021/4-3 and dated 25.03.2021.

### 4. Results

The distribution of respondents according to their demographic characteristics is given in Table 1.

**Table 1.** *Distribution of demographic characteristics*

		n	%
Gender	Woman	54	46,9
	Male	61	53
Age	18-25	15	13
	26-35	43	37,3
	35 over	57	49,5
State of education	Primary education	13	11,3
	High school	30	26
	Associate degree	21	18,2
	Bachelor's degree	24	20,8
	Postgraduate	10	8,6
Occupation	Doctorate	17	14,7
	Nurse	40	34,7
	Doctor	38	33
	Other	37	32,1

53% of the respondents are male, 49.5% are over 35 years old, 26% are high school graduates, and 34.7% are nurses.

**Table 2.** *Organizational structure, teamwork performance, teamwork attitudes confirmatory factor analysis fit indices of scales*

Index	Good Fit	Acceptable Fit	Organizational Structure	Teamwork Performance	Teamwork Attitudes
X <sup>2</sup>	x	x	20,308	312,986	631,001
sd	x	x	10	161	282
X <sup>2</sup> /sd	≤ 3	≤ 5	2,031	1,944	2,238
RMR	≤ 0,05	≤ 0,08	0,031	0,037	0,062
GFI	≥ 0,95	≥ 0,90	0,969	0,844	0,874
AGFI	≥ 0,90	≥ 0,85	0,913	0,807	0,819
CFI	≥ 0,97	≥ 0,90	0,991	0,967	0,930
RMSEA	≤ 0,05	≤ 0,08	0,076	0,073	0,083

When the CFA results for the Organizational Structure scale are examined, it is seen that the calculated fit indices are fully met. No item was removed from the scale. The scale structure is compatible with the study data.

When the DFA results for the Teamwork Performance scale were examined, the GFI and AGFI indices almost provided the acceptable limit, and the Chi-square goodness of fit, RMR, CFI, and RMSEA indices completely provided the acceptable limit. No item was removed from the scale. The scale structure is compatible with the study data.

When the DFA results for the Teamwork Attitudes scale were examined, the GFI, AGFI, and RMSEA indices almost provided the acceptable limit, and the Chi-square goodness of fit, RMR, and CFI indices completely provided the acceptable limit. Items 21 and 22 with a low factor load from the scale were excluded from the analysis. The scale structure is compatible with the study data.

**Table 3.** Organizational structure, teamwork performance, teamwork attitudes distribution of DFA factor loads of scales

Dimension	Item	$\beta$	sh.	t	p
Organizational Structure	OS7	0,862			
	OS6	0,673	0,055	12,677	0,000
	OS5	0,872	0,066	15,809	0,000
	OS4	0,891	0,059	16,478	0,000
	OS3	0,726	0,054	14,424	0,000
	OS2	0,890	0,063	16,430	0,000
	OS1	0,887	0,060	16,315	0,000
Teamwork Performance	TP20	0,647			
	TP19	0,842	0,104	12,047	0,000
	TP18	0,866	0,138	10,101	0,000
	TP17	0,878	0,137	10,206	0,000
	TP16	0,901	0,137	10,41	0,000
	TP15	0,868	0,136	10,121	0,000
	TP14	0,896	0,141	10,368	0,000
	TP13	0,881	0,149	10,233	0,000
	TP12	0,902	0,143	10,418	0,000
	TP11	0,905	0,143	10,442	0,000
	TP10	0,885	0,143	10,271	0,000
	TP9	0,896	0,139	10,366	0,000
	TP8	0,907	0,15	10,462	0,000
	TP7	0,893	0,14	10,34	0,000
	TP6	0,896	0,143	10,364	0,000
	TP5	0,855	0,124	10,001	0,000
	TP4	0,772	0,091	12,367	0,000
TP3	0,851	0,132	9,96	0,000	
TP2	0,856	0,143	10,007	0,000	
TP1	0,724	0,098	11,752	0,000	
Team	TAS	0,776			

Structure (TA)	TA4	0,851	0,087	12,846	0,000
	TA3	0,911	0,094	14,095	0,000
	TA2	0,896	0,091	13,780	0,000
	TA1	0,824	0,101	12,321	0,000
	TA6	0,754	0,090	11,028	0,000
Leadership (TA)	TA11	0,885			
	TA10	0,853	0,057	16,318	0,000
	TA9	0,835	0,061	15,590	0,000
	TA8	0,871	0,060	17,036	0,000
	TA7	0,868	0,058	16,944	0,000
	TA12	0,897	0,060	18,243	0,000
Situation Monitoring (TA)	TA17	0,718			
	TA16	0,839	0,105	11,322	0,000
Mutual Support (TA)	TA15	0,854	0,086	13,807	0,000
	TA14	0,883	0,107	11,947	0,000
	TA13	0,893	0,109	12,083	0,000
Communication (TA)	TA18	0,798	0,114	10,746	0,000
	TA23	0,730			
	TA20	0,625	0,111	8,420	0,000
Communication (TA)	TA19	0,799	0,105	10,921	0,000
	TA28	0,842			
	TA27	0,711	0,072	10,856	0,000
	TA26	0,883	0,071	15,130	0,000
Communication (TA)	TA25	0,850	0,073	14,215	0,000
	TA24	0,618	0,078	8,989	0,000

The distribution of factor loads ( $\beta$  item coefficients) according to the CFA results of the Organizational Structure, Teamwork Performance, and Teamwork Attitudes scales are given in the table. There is no item with a low factor load.

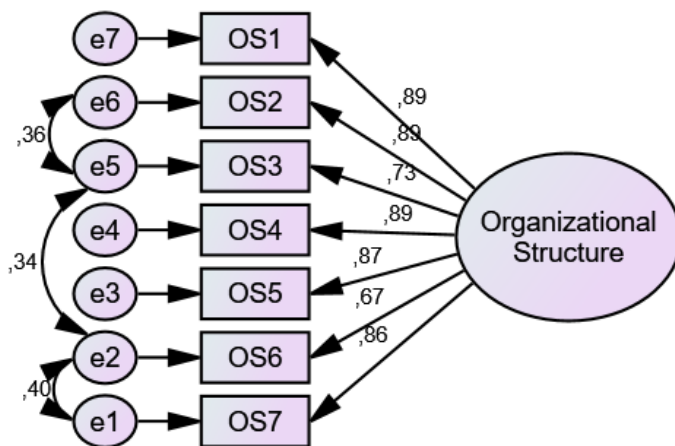


Figure 2. Organizational structure DFA diagram

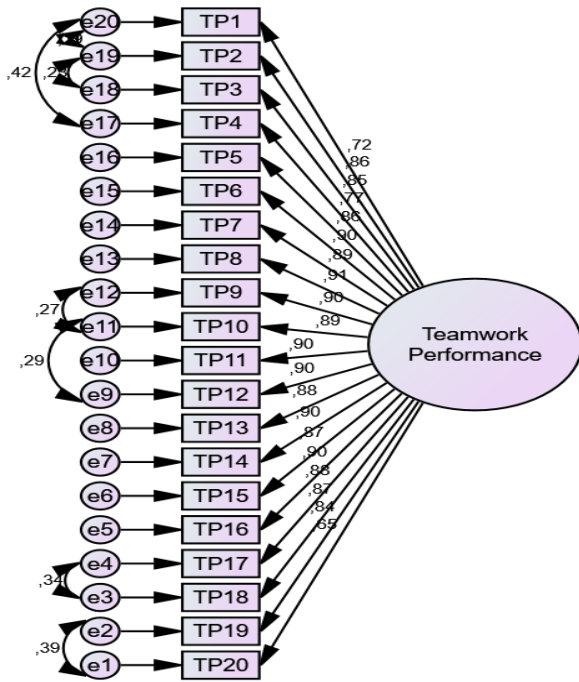


Figure 3. Team performance DFA diagram

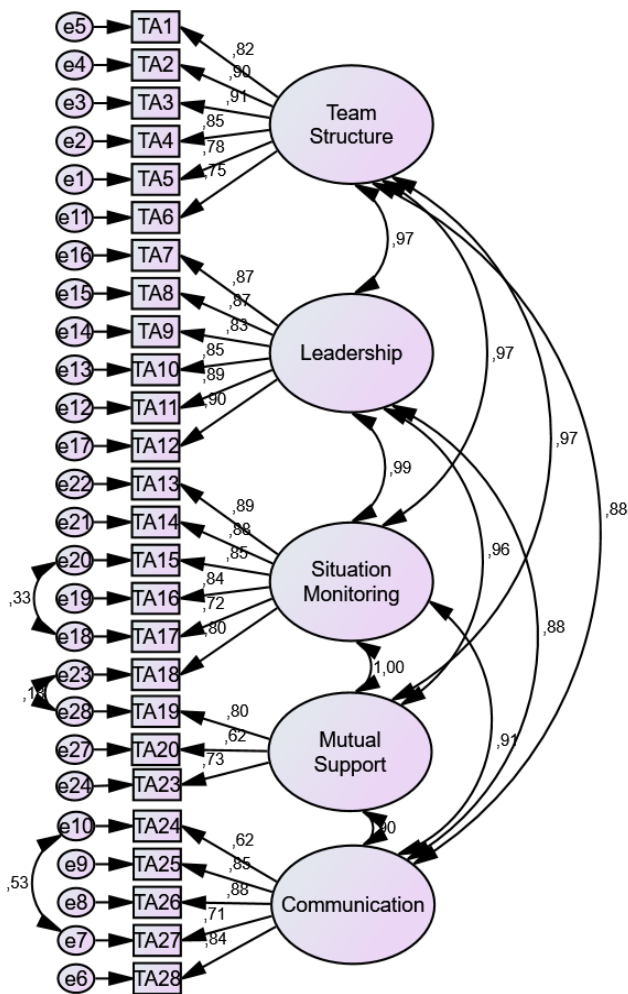


Figure 4. Teamwork attitudes DFA diagram



**Table 4.** Organizational structure, teamwork performance, teamwork attitude's reliability analysis results of scales

	Cronbach's Alpha	N of Items
<b>Organizational Structure</b>	0,946	7
<b>Teamwork Performance</b>	0,983	20
Team Structure	0,932	6
Leadership	0,949	6
Situation Monitoring	0,930	6
Mutual Support	0,762	3
Communication	0,895	5
<b>Teamwork Attitudes</b>	0,979	26

Reliability analysis results of Organizational Structure, Teamwork Performance, and Teamwork Attitudes scales are given. According to Cronbach's Alpha coefficients, the reliability level is very high (Cronbach's Alpha>0.800) in the scales and sub-dimensions (which is quite high in the Mutual Support sub-dimension). Scale reliability was ensured.

**Table 5.** Organizational structure, teamwork performance, teamwork attitudes descriptive statistics of their scores

	Min.	Max.	Mean	Sd.	Skewness	Kurtosis
<b>Organizational Structure</b>	9	33	20,47	7,78	0,18	-1,34
<b>Teamwork Performance</b>	29	94	65,37	21,06	-0,24	-1,46
Team Structure	6	28	19,67	6,51	-0,29	-1,43
Leadership	7	30	19,40	6,74	-0,20	-1,43
Situation Monitoring	6	29	19,38	6,54	-0,31	-1,18
Mutual Support	3	15	9,41	3,00	-0,16	-0,98
Communication	6	24	15,38	4,65	-0,01	-0,89
<b>Teamwork Attitudes</b>	38	120	83,24	25,90	-0,28	-1,37

Descriptive statistics are given regarding the scores calculated from the items of the Organizational Structure, Teamwork Performance, and Teamwork Attitudes scales determined according to the CFA results. The skewness and kurtosis coefficients examined for the assumption of normality are within the limits of the normal distribution (skewness/kurtosis;-3:+3).

**Table 6.** Organizational structure, teamwork performance, and teamwork attitudes in relation to scores

		1	2	3	4	5	6	7	8
<b>Organizational Structure (1)</b>	r	1	,694**	,715**	,726**	,746**	,736**	,716**	,771**
	p		<b>0,000</b>	<b>0,000</b>	<b>0,000</b>	<b>0,000</b>	<b>0,000</b>	<b>0,000</b>	<b>0,000</b>
<b>Teamwork Performance (2)</b>	r		1	,902**	,919**	,901**	,824**	,862**	,944**
	p			<b>0,000</b>	<b>0,000</b>	<b>0,000</b>	<b>0,000</b>	<b>0,000</b>	<b>0,000</b>
Team Structure (3)	r			1	,920**	,913**	,821**	,809**	,961**
	p				<b>0,000</b>	<b>0,000</b>	<b>0,000</b>	<b>0,000</b>	<b>0,000</b>
Leadership (4)	r				1	,924**	,818**	,805**	,964**
	p					<b>0,000</b>	<b>0,000</b>	<b>0,000</b>	<b>0,000</b>
Situation Monitoring (5)	r					1	,858**	,837**	,972**

	<b>p</b>	<b>0,000</b>	<b>0,000</b>	<b>0,000</b>
Mutual Support (6)	r	1	,747**	,886**
	<b>p</b>		<b>0,000</b>	<b>0,000</b>
Communication (7)	r		1	,890**
	<b>p</b>			<b>0,000</b>
<b>Teamwork Attitudes (8)</b>	r			1
	<b>p</b>			

\*\*p<0,01, \*p<0,05 there is a meaningful relationship, p>0,05 there is no meaningful relationship, Correlation coefficient power levels; 0<r<0,299 weak, 0,300<r<0,599 medium, 0,600<r<0,799 strong, 0,800<r<0,999 very strong; Pearson Correlation

Organizational Structure and Teamwork Performance (r=0.694), Team Structure (r=0.715) Leadership (r=0.726), situation monitoring (r=0.746), Mutual Support (r=0.736), Communication (r=0.716) Teamwork Attitudes (There was a positive and statistically significant relationship between r=0.771) (p<0.05).

There is a positive correlation between teamwork performance and Team structure (r=0.902) leadership (r=0.919), Situation Monitoring (r=0.901), Mutual Support (r=0.824), Communication (r=0.862) Teamwork Attitudes (r=0.944), there is a statistically significant relationship (p<0.05).

Teamwork attitudes dimensions are positively and statistically significant in themselves (p<0.05).

#### 4.1. Testing Research Hypotheses

This study aims to investigate the mediating effect of organizational structure on the effect of teamwork attitudes and sub-dimensions (Team Structure, Leadership, Situation Monitoring, Mutual Support, and Communication) on team performance. The analysis results of the hypotheses developed in this context are summarized in Tables 7, 8, 9, 10, and 11.

**Table 7.** Organizational structure mediating role of team structure dimension on the effect of teamwork performance

Path	Bootstrap Estimate				Model	
	B	se.	%95 CI low.	%95 CI up.	R <sup>2</sup>	F
TA_TS>OS	0,7148*	0,0524	0,6113	0,8182	0,5109	185,9490*
OS>TP	0,1004*	0,0458	0,0100	0,1908	0,8184	398,8675*
<b>TA_TS &gt;TP</b>						
Total effect	0,9019*	0,0324	0,8381	0,9658	0,8135	776,3369*
Direct effect	0,8302*	0,0458	0,7398	0,9206	x	x
Indirect effect	0,0718*	0,0433	0,0067	0,1751	x	x

n=5000; Bootstrap - b\*p<0,05 there is a meaningful effect, F\*p<0,05 model is meaningful; Process regression

The team structure dimension (B=0.7148) has a positive and statistically significant effect on organizational structure (p<0.05). Organizational structure (B=0.1004) has a positive and statistically significant effect on teamwork performance (p<0.05). The total (0.9019), direct (0.8304), and indirect (0.0718) effects of team structure dimension on teamwork performance are positive and statistically significant (according to the confidence interval, the H1 hypothesis is accepted).

**Table 8.** Organizational structure mediating role of leadership dimension on the effect of teamwork performance

Path	Bootstrap Estimate				Model	
	B	se.	%95 CI low.	%95 CI up.	R <sup>2</sup>	F
TA_LD>OS	0,7258*	0,0516	0,6241	0,8276	0,5268	198,1994*
OS>TP	0,0560	0,0428	-0,0284	0,1404	0,8467	488,6915*
<b>TA_LD &gt;TP</b>						
Total effect	0,9193*	0,0295	0,8611	0,9775	0,8452	971,7813*
Direct effect	0,8787*	0,0428	0,7943	0,9631	x	x
Indirect effect	0,0406	0,0366	-0,0149	0,1314	x	x

n=5000; Bootstrap - b\*p<0,05 there is a meaningful effect, F\*p<0,05 model is meaningful; Process regression

Leadership dimension (B=0.7258) has a positive and statistically significant effect on organizational structure (p<0.05). Organizational structure (B=0.0560) did not have a statistically significant effect on teamwork performance (p>0.05). Total (0.9193), and direct (0.8787) effects of leadership dimension on teamwork performance are positive and statistically significant, indirect (0.0406) effects are not statistically significant (the H<sub>2</sub> hypothesis is rejected according to the confidence interval). The confidence interval includes zero.

**Table 9.** Organizational structure mediating role of situation monitoring dimension on the effect of teamwork performance.

Path	Bootstrap Estimate				Model	
	B	se.	%95 CI low.	%95 CI up.	R <sup>2</sup>	F
TA_SM>OS	0,7460*	0,0499	0,6475	0,8445	0,5565	223,3388*
OS>TP	0,0484	0,0488	-0,0478	0,1446	0,8133	385,5477*
<b>TA_SM &gt;TP</b>						
Total effect	0,9013*	0,0325	0,8372	0,9653	0,8123	770,1742*
Direct effect	0,8652*	0,0488	0,7689	0,9614	x	x
Indirect effect	0,0361	0,0502	-0,0467	0,1519	x	x

n=5000; Bootstrap - b\*p<0,05 there is a meaningful effect, F\*p<0,05 model is meaningful; Process regression

The situation monitoring dimension (B=0.7460) has a positive and statistically significant effect on organizational structure (p<0.05). Organizational structure (B=0.0484) did not have a statistically significant effect on teamwork performance (p>0.05). Total (0.9013), direct (0.8652) positive and statistically significant effects of situation monitoring dimension on teamwork performance, indirect (0.0361) effects are not statistically significant (H<sub>3</sub> hypothesis is rejected according to the confidence interval). The confidence interval includes zero.

**Table 10.** Organizational structure mediating role of mutual support dimension on the effect of teamwork performance

Path	Bootstrap Estimate				Model	
	B	se.	%95 CI low.	%95 CI up.	R <sup>2</sup>	F
TA_MS>OS	0,7361*	0,0507	0,6359	0,8362	0,5418	210,4672*
OS>TP	0,1912*	0,0613	0,0702	0,3122	0,6950	201,6610*
<b>TA_MS &gt;TP</b>						
Total effect	0,8236*	0,0425	0,7397	0,9075	0,6783	375,2259*
Direct effect	0,6828*	0,0613	0,5618	0,8039	x	x
Indirect effect	0,1407*	0,0718	0,0166	0,2975	x	x

n=5000; Bootstrap - b\*p<0,05 there is a meaningful effect, F\*p<0,05 model is meaningful; Process regression

The mutual support dimension (B=0.7361) has a positive and statistically significant effect on organizational structure (p<0.05). Organizational structure (B=0.1912) has a positive and statistically significant effect on teamwork performance (p<0.05). The total (0.8236), direct (0.6828), and indirect (0.1407) effects of the mutual support dimension on teamwork performance are positive and the statistically significant confidence interval does not include zero (According to the confidence interval, the H4 hypothesis is accepted).

**Table 11.** Organizational structure mediating role of communication dimension on the effect of teamwork performance

Path	Bootstrap Estimate				Model	
	B	se.	%95 CI low.	%95 CI up.	R <sup>2</sup>	F
TA_CM>OS	0,7159*	0,0523	0,6127	0,8192	0,5126	187,1684*
OS>TP	0,1567*	0,0532	0,0517	0,2618	0,7556	273,6634*
<b>TA_CM &gt;TP</b>						
Total effect	0,8624*	0,0379	0,7875	0,9372	0,7437	516,3891*
Direct effect	0,7501*	0,0532	0,6451	0,8552	x	x
Indirect effect	0,1122*	0,0609	0,0038	0,2435	x	x

n=5000; Bootstrap - b\*p<0,05 there is a meaningful effect, F\*p<0,05 model is meaningful; Process regression

The communication dimension (B=0.7159) has a positive and statistically significant effect on organizational structure (p<0.05). Organizational structure (B=0.1567) has a positive and statistically significant effect on teamwork performance (p<0.05). The total (0.8624), direct (0.7501), and indirect (0.1122) effects of the Communication dimension on teamwork performance are positive, and the statistically significant confidence interval does not include zero, (according to the confidence interval, the H5 hypothesis is accepted).

**Table 12.** Organizational structure mediating role of teamwork attitudes on the effect of teamwork performance

Path	Bootstrap Estimate				Model	
	B	se.	%95 CI low.	%95 CI up.	R <sup>2</sup>	F
TA>OS	0,7705*	0,0478	0,6763	0,8648	0,5937	260,1507*
OS>TP	-0,0819	0,0386	-0,1580	-0,0057	0,8930	738,5116*
<b>TA&gt;TP</b>						

Total effect	0,9435*	0,0248	0,8945	0,9925	0,8903	1444,1052*
Direct effect	1,0066*	0,0386	0,9305	1,0827	x	x
Indirect effect	-0,0631	0,0330	-0,1178	0,0108	x	x

n=5000; Bootstrap -  $b^*p < 0,05$  there is a meaningful effect,  $F^*p < 0,05$  model is meaningful; Process regression

The teamwork attitudes dimension ( $B=0.7705$ ) has a positive and statistically significant effect on organizational structure ( $p < 0.05$ ). Organizational structure ( $B=0.0819$ ) did not have a statistically significant effect on teamwork performance ( $p > 0.05$ ). The total (0.9435), and direct (1.0066) effects of the teamwork attitudes dimension on teamwork performance are positive and statistically significant, but the indirect (-0.0631) effect is not statistically significant (according to the confidence interval, the H6 hypothesis is rejected). The confidence interval includes zero.

## 5. Conclusion

Baker et al. (2003) defined teamwork in Classical System Theory, which orders team inputs, team processes, and team outputs over time. Team inputs focus on the characteristics of the task, the elements of the job, and the attitudes of its members, while team processes center around interaction and coordination among members, and team outcomes focus on the result of team performance (Gündüz-Hoşgör, 2022). Team members' interdependence, cooperation, open communication, and joint decision-making practices add value to patient, organization, and employee processes (Xyrichis & Ream, 2008). Through the study, it was determined that the effect of teamwork attitudes, including team structure, mutual support, and communication sub-dimensions, on team performance was mediated by organic organizational structure.

These results are compatible with the literature. Tata and Prasad (2004) aimed to evaluate the links between organizational structure, team self-management, and team effectiveness judgments. The result showed that contextual variables such as organizational structure can have an impact on team effectiveness. In a study by Phuong and Huy (2022), The Effects of Teamwork on Employee Performance, the researchers aimed to measure the effect of teamwork on employee performance. The results of the research showed that teamwork plays a vital role in affecting employee performance. In Ardiç et al.'s (2021) study, the aim was to investigate whether workplace friendship has a mediator role in the relationship between nurses' teamwork and job performance. The results obtained from the study showed that there was a significant and positive relationship between teamwork, workplace friendship, task performance, and contextual performance. As a consequence of the study, it was found that workplace friendship had a partial mediating effect on the teamwork-task performance relationship.

Ruiz and Adams (2004) determined the relationship between individual attitudes towards teamwork and the characteristics required for an effective team, stating that experience has a positive effect on people's attitudes towards teamwork, including communication, accountability, psychological safety, common purpose, clarity of role, and clear goals. Teamwork is crucial for existing healthcare systems, as it improves the quality of health services, reduces medical errors, and lowers costs (Alsane, 2016). Collaborative practice and effective teamwork can address complex issues, increasing quality, safety, and reducing medical costs and errors. Healthcare teamwork processes involve rapid learning, listening intently, adapting, and speaking up among clearly defined team members and loose collaborators (Rosen et al., 2018). Organic systems, centers of control, authority, and communication are problem-specific and contingent upon where the expertise resides to solve a problem. Consequently, there is no designated top management in an organic system; the top is instead an ad hoc center defined by task-relevant, specialized knowledge (Courtright et al., 1989).

Organic structures are decentralized so decision-making power is distributed throughout the hierarchy, and people have the authority to make decisions in line with organizational needs, while roles

are defined in general terms and employees are constantly developing new job skills because of their frequently changing duties (Jones, 2017). Although the goals and duties of the teams are different in health care delivery, teamwork is necessary both in the clinical field and in managerial activities because effective patient care and management of care services depend on teams which do not have communication and coordination problems. Moreover, in the clinic, teams not only work to eliminate the medical problems but also to identify the problems that may cause medical errors and to find solutions. With effective teamwork, gaps and repetitions in service are eliminated, continuity in patient care is ensured, and the quality-of-care increases, while costs and length of hospital stays are reduced and time is saved. It is stated that with teamwork, members understand each other's roles and positions better, solve problems better, and the synergy within the team reflects positively on patient outcomes and job satisfaction and performance of employees (Saygılı & Özer, 2020).

Teamwork is inevitable, and the current working environment is important for teams to be effective, due to the structural characteristics of health institutions. This environment should have qualities allowing constructive human relations, mutual respect, open-mindedness and flexibility, participatory management, personal and professional trust, free expression and discussion of opinions, maintaining services within the framework of expertise, and displaying original professional skills (Öğüt & Kaya, 2011). In addition, teamwork can provide sharing information between the team members and allows to avoid confusion, while increasing productivity and work experience, as well as providing opportunities to teach younger medical staff in the field of supervision (Kairytė et al., 2022). However, the high level of expertise and functional dependencies of personnel working in health institutions require teamwork which is highly sensitive and intolerant to errors and uncertainties (Çelik & Karaca, 2017). Therefore, managerial knowledge, experience and competences of managers within health institutions can only be provided by the existence of an effective team harmony. There is also a need for leader managers who motivate employees and support teamwork, and the team leader should create an effective organizational culture by organizing the whole team, providing opportunities to the team, and directing subordinates in the line of the corporate goals.

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