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Organizational Agility, Competitive Capabilities, and the Performance of Health Care Organizations During the Covid-19 Pandemic

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Abstract

Purpose: Managers of healthcare organizations must be much more dynamic and agile to survive in a competitive environment. Administrators, managers, and leaders in healthcare organizations must meet both patients' and staff's needs, expectations, and requests at the maximum level in order to create organizational agility. What counts among these responsibilities is the use of operational competitive capabilities at the highest level and being organizationally agile? In this context, this study determines the relationship between the operational competitive capabilities of healthcare organizations and organizational agility and examines the mediating role of organizational agility between operational competitive capabilities and organizational performance in healthcare organizations in Turkey.

Methodology: The data was collected from the 220 managers of health organizations in Turkey through questionnaires, which were analyzed with the SPSS 26 and AMOS 26 programs.

Results: The findings revealed a positive relationship between operational competitive capabilities of managers and between organizational agility and organizational agility, which have a full mediating role between operational competitive capabilities and organizational performance in healthcare organizations.

Conclusion: Today's healthcare organizations' managers face such important problems and unexpected developments as adapting to a rapidly changing environment and struggles to avoid uncertainty. Therefore, the managers must use their operational competitive capabilities at the highest level and be organizationally agile to maximize their organizations' performance and survive in this highly competitive environment.

Keywords: healthcare management, operational competitive capabilities, organizational agility, organizational performance, Covid-19.

JEL: M1, M12; M5, M51, M54

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Introduction

Covid-19 is a worldwide disease that is quickly expanding across the population. The number of Covid-19 patients and relevant care requirements in terms of housing capability of Covid-19 emergency care and treatment facilities, staffing, and modern treatment modalities are growing day by day as a result of the pandemic's growth. This drives management processes into a troublesome situation. Managers must struggle with this complexity and the uncertainty changing of priorities by developing new effective strategies through innovative models and methods.

Organizational agility is described as the ability to adjust operational states efficiently in response to unpredictable and evolving demands (Narasimhan et al., 2006). Organizational agility is critical to improving procedures in terms of infrastructure and management requirements for a complex demand in the global business environment in healthcare organizations.

In today's rapidly changing and increasingly global business environment, no organization or business is safe enough from competition. Therefore, organizations must operate in uncertain, hyper-dynamic, competitive, and changeable environments. There are many sources of change, which result from such factors as intensified global competition, reduction in delivery time, high customer expectations, demand diversification, and new technologies (Kettunen, 2009). Thus, a new normal strategic planning should be more dynamic and short-term-oriented. Traditional long-term strategic planning and unchangeable strategies are no longer viable or available as sources in the perspective of strategic competition. There is no certainty about the rapid and sudden change in the business environment, and it is so hard to predict what will happen even one year from now (Doz and Kosonen, 2010; Hamel and Breen, 2007). What has especially shortened this time of reliable foresight is the Covid-19 pandemic. Thus, organizations should keep the ability to compete in sustainable ways to survive.

The concept of organizational agility was designed to address the above issues (Goldman and Nagel, 1993; Erande and Verna, 2008): it is the ability to meet uncertain and unpredictable customer demand, but also adapt to environmental changes, unlike traditional mass production and service. Many studies identify organizational agility as an important quality factor in a competitive market (Akkaya and Tabak, 2020; Parsa et al., 2020; Tamtam and Tourabi, 2020).

The interactions among organizational agility factors in the manufacturing and service industries have been studied by several researchers. There are many factors that

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contribute to healthcare organizations' organizational agility, and this article focuses on the main ones that have the most substantial impact. The interrelationships between organizational agility variables in healthcare organizations are yet to be addressed by any of the researchers. The catalyst for this analysis is a research gap in developing a mediating modeling of organizational agility between operational competitive capabilities and organizational performance in healthcare organizations, but also rating these variables. Even though limited studies were conducted on those variables (Liu et al., 2014; Teece et al., 2016; Baškarada and Koronios, 2018; Gyemang and Emeagwali, 2020), no link was established between competitive capabilities, organizational agility, and the performance of healthcare organizations. Thus, this article tests the impact operational competitive capabilities have on a firm's organizational performance, and how it can be sustained. Previous studies mainly focused on the effects of competitive capabilities and how to satisfy the needs of customers, but they failed to examine in detail the influence competitive capabilities have on organizational performance and agility. Moreover, competitive capability studies rarely focus on healthcare organizations. Therefore, our study sought to contribute to the literature by examining the relationship between competitive capabilities, organizational performance, and organizational agility in healthcare organizations. Furthermore, we examined the mediating role of organizational agility between operational competitive capabilities and organizational performance in healthcare organizations in Turkey.

The article will develop in the following order. To establish hypotheses, the next section will cover a critical literature review. Section three will present the methodology of our study. Section four will describe the study's analyses, while the concluding section will discuss managerial implications, limitations, and recommendations for future research.

Literature Review

Dynamic Capabilities and Organizational Agility

Agility is defined as an entity's ability to timely respond to changes timely (Al Humdan, Shi, and Behnia, 2020). To achieve organizational agility, an organization must proactively handle a huge number of distributed information, quickly implement flexible business processes, and efficiently coordinate activities across globally disparate organizations. Helfat and Winter (2011) propose that the degree of performance should be evaluated using adaptive resilience, which is to reveal how far a firm's dynamic

capability allows it to succeed by maintaining and expanding its resources. The dynamic capabilities (DC) that foster a high degree of adaptive resilience enables firms to live and develop in response to changes in the business environment, including consumer needs and company plans (Wilden et al., 2013). One of the primary means by which DC operates is by enhancing the organization's speed, value, and effectiveness (Farzaneh et al., 2020). The ability of businesses to acquire an advantage in market operations – which leads to cost reductions – can have a beneficial influence on competitive performance by helping them to respond quickly, efficiently, and effectively to changing environments. Thus, DC has evolved into a critical skill for promoting agility by combining dynamic capabilities dimensions: sensing, seizing, learning, integrating, and reconfiguring. All the activities complement one another and have the potential to improve organizational agility. As a result, businesses with a strong dynamic capacity can detect, scan, and observe the environment on a frequent basis – as well as monitor actions with partners – to achieve and retain market agility. Therefore, the worth of DC can be evaluated in terms of organizational agility, especially because dynamic capabilities are positively related to organizational agility (Gyemang and Emeagwali, 2020).

The traditional method of strategic planning is no longer effective for the enterprise in light of the high degree of complexity, while organizational agility is characterized as the ability to quickly identify and utilize opportunities, change course, and avoid collisions (Zhang and Sharifi, 2000). Organizational agility is often characterized as a company's ability to swiftly respond to both expected and unexpected changes in its internal and external business climate (Akkaya and Tabak, 2020) by way of four basic abilities: flexibility, speed, responsiveness, competence (Zhang and Sharifi, 2007; Walter, 2021).

Dynamic and Operational Competitive Capabilities

The conceptual foundations of dynamic capacities were based on the works of Teece, Pisano, and Shuen (1997), Eisenhardt and Martin (2000), Zollo and Winter (2002), and Helfat et al. (2009, p. 4); the last authors define dynamic capabilities as "the capacity of an organization to, intentionally, create, extend or modify the resource base." This definition provides the concept of intentional action, which constitutes a valuable contribution to the deployment and development of dynamic capabilities in the business environment. Dynamic capabilities and competitive capabilities are two important interrelated concepts. In fact, dynamic capabilities can be presented as the antecedent of operational competitive capabilities.

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Operational competitive capabilities are indicators of the effectiveness of strategic agility. These capabilities should be instant performance metrics so that timely corrective action can be taken to improve organizational performance (Zhang and Sharifi, 2007). Operational competitive capabilities are categorized into five dimensions of innovation, service quality, reliability, process flexibility, and cost leadership. Innovation involves designing new goods and services or creating new business models and innovative ways to generate value for the organization (Abu-Radi and Al-Hawajreh, 2013; Rosenzweig et al., 2003).

Dynamic Capabilities and Organizational Performance

Dynamic capabilities (DC) strongly influences a firm's performance in a variety of ways, including balancing the resource base with volatile business conditions, initiating market changes, and improving organizational performance (Eisenhardt and Martin, 2000). Moreover, DC increase the speed, efficiency, and performance of organizations (Hernández-Linares, Kellermanns, and López-Fernández, 2021); DC guide and help organizations to improve their income by sensing and seizing operations for better competitive performance, because DC are important for growing a firm's competitive performance and renewal as they show a positive link with organizational performance (Gyemang and Emeagwali, 2020).

Organizational performance can be measured in three ways: financial performance, operational performance, and organizational effectiveness (Venkatraman and Ramanujam, 1986). For the purpose of this study, organizational performance refers to both operational performance and organizational effectiveness, as it relates to the performance of management strategies. Organizational performance can be used to evaluate the success of a company's strategic measures (Chan and Mak, 2012). The outcome of organizational operations is organizational success, which includes productivity and effectiveness, because the differences in organizational goals and outcomes can be explained using organizational performance (Alrowwad and Abualoush, 2020).

Covid-19 and Healthcare Organizations

Humanity has experienced more than one epidemic disease. Millions of people died as a result (Hays, 2020). The most recent epidemic is Covid-19 spread by the SARS-CoV-2 virus. Covid-19 first appeared in Wuhan in December 2019. Next, the virus quickly spread to all countries in the world, and it was declared a pandemic by the World Health Organization (WHO; Cuvinotta and Vanelli, 2020). The pandemic created

problems in many areas, especially in the health sector. Turkey's Ministry of Health announced that the first case of this virus occurred in March, 2020 (Covid-19, 2020).

With the spread of the Covid-19 pandemic, national health systems entered difficult times as health and hospital resources were urgently needed. Some consider that the health industry has gained importance in this period, as many patients became infected in a very short time, hence the need for intensive care grew rapidly (Pedrazza et al., 2018), while managers of health institutions had to make their organizations more agile.

Khafaie and Rahim (2020) conducted an international analysis by considering the case of fatality and recovery rates associated with Covid-19. Verelst, Kuylen, and Beutels (2020) state that European health systems are under extreme pressure due to the coronavirus disease. They link country-specific cumulative Covid-19 deaths (intensity approximation) and active Covid-19 cases (magnitude approximation) to health system capacity measures, namely hospital beds, health workers, and health expenditures. Their analysis showed that many European countries may soon face health pressures that will exceed existing health capacities. Leaders and managers may provide an agile organizational system and improve their performance by using competitive capabilities.

Research Problem

This section will explain with theoretical arguments the assumed relations between the variables emphasized in the literature and conceptual framework, followed by proposed hypotheses.

Operational Competitive Capabilities and Organizational Performance

There is always competition where there is scarcity. Today, many companies conduct their activities in an environment of intense competition and rapid change. However, the unique characteristics of healthcare markets make this competition different from most other markets (Morrisey, 2001). Therefore, health institutions must consider the characteristics of health services while determining their competitive capabilities, because the basis of determining a competitive strategy is to be successful in a competitive environment and to use competitive abilities correctly. To determine the appropriate competitive strategies for a business, we should examine the sector in which the business is located, its competitive situation, and its ability to use its capabilities.

The purpose of business strategy development is to reduce the impact of organizational strengths and weaknesses and to develop strategies that will provide a competitive

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advantage (Schermerhorn, 2004). Firms must develop and implement value-creating strategies to increase their effectiveness and efficiency and to make profits by gaining strategic success. What is very important in a firm's development of a value-creating strategy is knowledge and the firm's relationships with the environment.

Studies on competitive capabilities in the health sector have intensified since the early 1980s. In the Turkish health system, the concept of competition surfaced simultaneously with liberal developments. Particularly in recent years, efforts to support private sector health investments, the autonomization of public health institutions, and paving the way for privatization caused the matter to gain momentum (Akbolat and Işık, 2012).

Firms operate in an environment in which competition intensifies, the economy is divided into smaller segments, rapid developments are experienced in information technologies, product diversity increases, profit margins decrease, and conscious consumers make highly rational decisions. In this context, companies may maintain and improve their profitability and competitive advantage only by determining their competitive capabilities. The criteria required for the strategic business unit are management, market, and performance (Islamoglu, 2000). On the other hand, the strategy of each business unit focuses on the development of one or more competitive capabilities appropriate for changing relationships. Competitiveness is one of the means to reach organizational performance (Man, Lau, and Chan, 2002, p. 133). Moreover, a firm's competitive ability level positively influences its performance level (Tracey et al., 1999). Considering the above, we proposed the following hypothesis:

> **H1:** There is a positive relationship between operational competitive capabilities and organizational performance in healthcare organizations in Turkey.

Operational Competitive Capabilities and Organizational Agility

There is a need for continuous renewal in the service sector in order to be one step ahead of other fields (Sağır and Aydın, 2018). Organizations in this field should focus on the factors that will increase their performance. Another important issue while adapting to the competitive environment is organizational agility. Agility means detecting changes (opportunities, threats, or a combination of both) in an organization's environment and focusing on its customers and shareholders by realigning resources, processes, and strategies, along with the ability to quickly respond to new situations (Ganguly et al., 2009). Organizational agility is the ability to work comfortably, by producing a high quality and effective performance of an organization, in a rapidly and steadily changing and fragmented global market environment (Tsourveloudis and

Valavanis, 2002). Today, organizations must be fast and flexible in order to survive in a highly competitive setting.

The reason for this situation is that companies try to quickly overcome the difficulties that arise due to competition and maintain the same speed in their decision processes. Thus, we proposed the following hypothesis:

H2: There is a positive relationship between operational competitive capabilities and organizational agility in healthcare organizations in Turkey.

Organizational Agility and Organizational Performance

The implementation of strategic policies that are the main objective of a business is generally related to the determination of its performance. The conditions of the new economy formed by the globalization process in the health sector reflect the necessity of being a flexible organization and the desire to increase the quality of life for individuals. In order for health institutions to follow these developments, they must develop their institutional capacities by adapting to changes.

McKinsey's 2006 report states that agility will increase in importance for senior managers over time and will play a critical role in corporate success. According to the report, the increased agility will bring benefits to organizations' ability to adapt to such unexpected changes as higher income, improved efficiency, and drive to market, which will be effective in achieving and maintaining a competitive advantage. Agility contributes to the competitive ability and sustainability of an organization and also affects the organizational performance in case of uncertainty. Moreover, agility can mean the quality of the organization's ability to act quickly. Therefore, managers in health institutions should aim to benefit from all kinds of constantly changing and developing technological elements. Following and using technological elements is of great importance to providing a competitive advantage (Ateş et al., 2019), which will happen through the agility that will be brought to institutions using technological elements. Therefore, we proposed the following hypothesis:

H3: There is a positive relationship between organizational agility and organizational performance in healthcare organizations in Turkey.

Organizational Agility, Competitive Capabilities, and Organizational Performance

In an unpredictable world and hypercompetitive environment, planning is incredibly difficult, but companies can try to mitigate the effects of instability by forecasting transitions and preparing for them (Oetinger, 2004). Firms, especially healthcare

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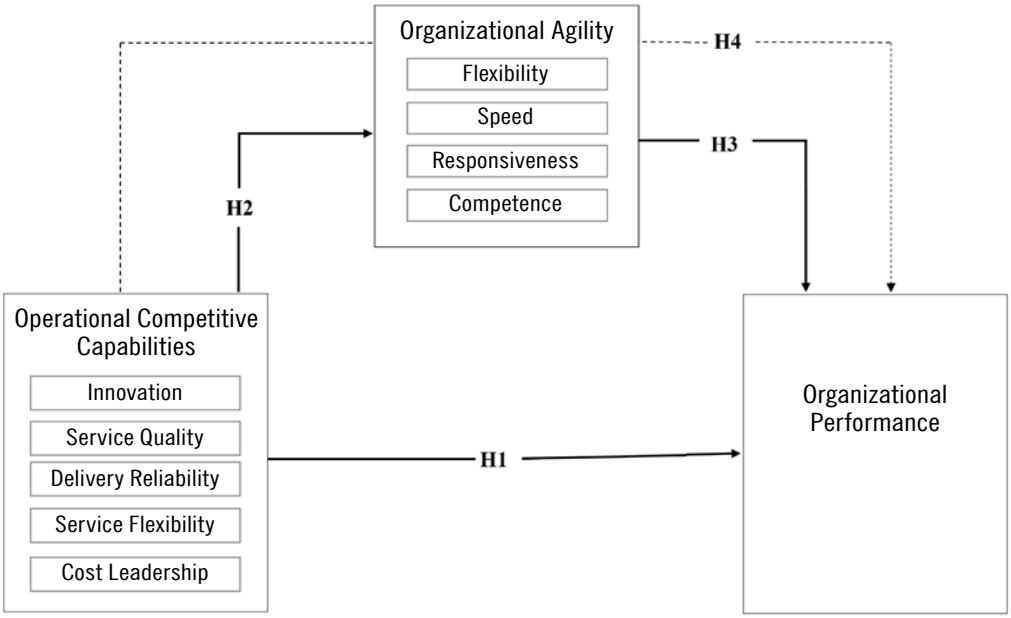
organizations, face significant environmental turbulence in the modern world due to ever-changing competition, changing technologies, and fluctuating patient demands. High levels of environmental turbulence will hinder healthcare organizations' activities. Turbulence refers to the uncertainty and threats that a company faces in a competitive environment. As a result, healthcare organizations should concentrate on handling complexity and reducing risk.

The concept of agility – defined as "the ability to act easily and quickly" – started to be used in the production area in the 1990s and later in different disciplines and fields (Breu et al., 2002). Agile companies are companies that sense and adapt to change in order to sustain their existence, especially in competitive environments. Agile companies are also the firms to manage this change quickly and easily (İşcan and Karabey, 2006). There are some studies on agility and competitive capabilities; some found that organizational agility decreased costs while increasing productivity (Hüseynov, 2010), while others examined the impact of integration strategies on competitive capabilities to conclude that business performance increases with the use of competitive capabilities (Lestari et al., 2020). Yet others found that competitive capabilities play an important role in the product development process and the competitive capabilities significantly affect the profit of manufacturing firms (Koufteros et al., 2002). To implement supply chain management in a healthcare service, a firm must be organizationally agile for rapid intervention and flexibility by scanning agile strategies (Aronsson et al., 2011). In the Covid-19 pandemic, organizations should focus on digitalization to survive in the competitive environment and managers should use their proactive competitiveness (Şen, 2020). To develop these skills, managers of health institutions should pay attention to service innovation (Öztürk and Günsel, 2018). These research results demonstrate that organizational agility and competitive capabilities profoundly impact organizational performance, in turn massively influencing entire organizations.

However, most of these studies focused on the manufacturing industry's agility and performance. In turn, this study based on organizational agility and competitive capabilities in the performance of healthcare organizations, for which we created the below research model (Figure 1) and hypothesized that:

> **H4:** Organizational agility has a mediating role between operational competitive capabilities and organizational performance in healthcare organizations in Turkey.

Figure 1. Research model



Source: own elaboration.

Research Methodology

The lack of a study that would examine the relationship between managers of private healthcare organizations, organizational agility, competitive capabilities, and organizational performance constituted the motive of this study. In this context, to examine the relationship between these variables, we collected data from 220 middle- and upper-level managers working in healthcare organizations in Western Turkey, using the random sampling method and three questionnaires. Research findings were obtained by using SPSS v25 and AMOS v25 statistical programs. In the analysis of data, confirmatory factor and reliability analyses were applied. Correlation and hierarchical regression analyses were performed to test cause-effect relationships.

Data Collection Tools

To collect data after the necessary literature review, three questionnaires besides demographic characteristics were applied. The operational competitive capabilities scale consisted of 18 items (Abu-Radi and Al-Hawajreh, 2013) while the organizational agility scale consisted of 17 items (Akkaya and Tabak, 2018). The organizational

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performance scale consisted of four items (Kirkman and Rosen, 1999; Sigler and Pearson, 2000). All three scales were composed of five-point Likert scales from 1 "strongly disagree" to 5 "strongly agree."

Sample

Private healthcare organizations in Western Turkey constituted the sample. The research was conducted between September 2020 and April 2021. A random sampling method was used to get data from administrators/managers (n=220). The random sampling method gives each participant an equal chance to participate in the research and equal weight to each participant in calculations (Arıkan, 2004). The ethics committee approved that this research was in accordance with the relevant ethical standards. The research data were collected by the researchers using online and face-to-face interviews. The interviews took around 10–15 minutes.

Research data were evaluated based on the responses of 220 participants. Table 1 shows the demographic characteristics of the participants in the study.

Table 1. Demographic characteristics of the participants

Groups	n	%
Gender		
Female	174	79.1
Male	46	20.9
Age		
18–20	36	16.4
21–30	66	30.0
31–40	56	25.5
41 and older	62	28.2
Education Level		
High School	24	10.9
Associate Degree	48	21.8
Bachelor's	60	27.3
Master's	60	27.3
PhD	28	12.7

Total Work Experience		
Less than 1 year	37	16.8
1–5	78	35.5
6–10	30	13.6
11–15	38	17.3
16–20	6	2.7
21 and above	31	14.1

Source: own elaboration.

Findings

Validity and Reliability Analysis of the Scales

The construct validity of the scales used in the study was evaluated by confirmatory factor analysis via structural equation modeling (Table 2 in Appendix 1). The items were significantly loaded on their own variable/factor ($t \geq 2.50$). Loading the indicators into their own factors in a statistically significant way provided support for convergent validity. We determined that the indices obtained as a result of the analyses met the fit criteria ($x^2=1252.321$, df=654, $x^2/df=1.915$, GFI=0.880, CFI=0.922, RMSEA=0.065, NFI=0.851). The factor loads obtained from the analysis are shown in Table 2, and all measurements appear above 0.60, which agrees with the suggestion of Hair et al. (2010).

As a result of the confirmatory factor analysis, the scale expressions were combined according to the results obtained, and a reliability analysis was performed. Table 2 shows the results of the reliability analysis. Measures internal consistency in reliability analysis, Cronbach's alpha, average variance explained (AVE), and AMOS-based composite reliability (CR) values were considered. For the convergent validity of the scales, besides factor loadings, CR and AVE values were considered important indicators. The fact that the AVE value was 0.50 and the CR value was above 0.70 was important in terms of providing convergent validity (Hair et al., 2010). Moreover, CR values were greater than AVE values, which was another evidence of validity (Byrne, 2010).

Following Table 2, we saw that all values were above the reliability values suggested in the literature (Nunnally, 1978; Fornell and Larcker, 1981). The criterion of having CR values higher than AVE values was realized in all dimensions. These findings revealed that the scales show sufficient reliability and discrimination validity.

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Table 2. Reliability analysis results

Variables	Number of items	Cronbach's Alpha	CR	AVE
Competence	8	0.940	0.938	0.655
Flexibility	3	0.856	0.857	0.668
Response	3	0.906	0.906	0.763
Speed	3	0.889	0.890	0.730
Organizational Agility	17	0.955	0.974	0.689
Innovation	4	0.919	0.921	0.745
Quality of Service	5	0.873	0.891	0.621
Delivery	2	0.699	0.761	0.614
Process Flexibility	4	0.884	0.894	0.681
Cost Leadership	3	0.920	0.921	0.796

Source: own elaboration.

Normal Distribution Analysis

For the normality of the distribution of values belonging to research variables, skewness and kurtosis measures and P–P plot graphs were examined and revealed. The fact that the skewness value was ±1 and the kurtosis value was ±2 was evaluated as the distribution does not show an excessive deviation from the normality. The skewness and kurtosis values are presented in Table 3. According to the findings, we determined that the variables showed a normal distribution. Parametric techniques were used in the analysis of the data.

Table 3. Test of normality

Variables	Mean	Std. Dev.	Skewness	Kurtosis
Organizational Agility	3.76	.73	-.689	.281
Operational Competitive Capabilities	3.87	.75	-.563	-.244
Organizational Performance	3.80	1.01	-.824	-.022

Source: own elaboration.

Correlation Analysis

Pearson correlation coefficient was used to determine the relationship between operational competitive capabilities, organizational agility, and organizational performance (Table 4).

Table 4. Correlation analysis results

Variables	1.	2.	3.
1. Organizational Agility	1		
2. Operational Competitive Capabilities	.785**	1	
3. Organizational Performance	.614**	.639**	1

Note: ** $p<0.01$.

Source: own elaboration.

According to Table 4, a positive relationship was found between all variables: organizational performance had a higher correlation with operational competitive capabilities.

Pearson correlation was used to determine the relationship between operational competitive capabilities dimensions and organizational agility dimensions (Table 5).

Table 5. Correlation analysis results: sub-dimensions

Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Competence	1								
2. Flexibility	.681**	1							
3. Response	.693**	.548**	1						
4. Speed	.711**	.567**	.630**	1					
5. Innovation	.754**	.601**	.790**	.660**	1				
6. Quality of Service	.749**	.798**	.715**	.728**	.740**	1			
7. Delivery	.722**	.659**	.756**	.699**	.764**	.716**	1		
8. Process Flexibility	.754**	.674**	.787**	.722**	.702**	.747**	.764**	1	
9. Cost Leadership	.735**	.582**	.691**	.643**	.785**	.780**	.714**	.698**	1

Note: ** $p<0.01$.

Source: own elaboration.

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According to Table 5, a positive relationship was found among all variables. The variables with the highest relationship appeared between flexibility and quality of service (r = .798). Since the correlation coefficients were not 0.80 and above, there appeared no autocorrelation.

Testing Hypotheses

To empirically test the hypotheses presented in the theoretical framework, a regression analysis was performed (Table 6).

Table 6. Regression analysis results

		Std. β	F	p	Results
H_1	Competitive → Performance	.139	.328*	.000	Supported
H_2	Competitive → Agility	.901	.694*	.000	Supported
H_3	Agility → Performance	.160	.787*	.000	Supported

Note: *p<0.05.

Source: own elaboration.

The variables in the research model and the causal relationships between these variables could be explained by regression analysis, which we assumed. As we saw from Table 6:

- there was a positive correlation between operational competitive capabilities and organizational performance (β = .139 p < .001), thus H_1 was supported.
- there was a positive correlation between operational competitive capabilities and organizational agility (β = .901 p < .001), thus H_2 was supported.
- there was a positive correlation between organizational agility and organizational performance (β = .160 p <. 001), thus H_3 was supported.

To determine the mediating effect of organizational agility on the relationship between operational competitive capabilities and organizational performance, we applied a four-step regression analysis proposed by Baron and Kenny (1986; Table 7).

The first model in Table 7 represented the relationship between operational competitive capabilities and organizational performance. The second model showed the mediating role of organizational agility between operational competitive capabilities and organizational performance. Thus, the first model explained 31% of the variance,

while additional organizational agility explained 47% of the variance. In other words, additional organizational agility explained the total 15% of the variance. Therefore, the research model was significant at the 0.05 confidence interval.

Table 7. Mediating variable effect

		Unstandardized β	Unstandardized Std. Error	Std. β	F	p
Model 1	Operational Competitive Capabilities	.544	.653	.406	1.328*	.005
Model 2	Operational Competitive Capabilities	.702	.654	.523	1.527*	.284
	Organizational Agility	.319	.041	.418		.000

Note: for Model 1 $R^2 = .316$ ($p < 0.05$); For Model 2 $R^2 = .473$ ($p < 0.05$); $\Delta R^2 = 0.157$ ($p < 0.05$); *$p < 0.05$.
Source: own elaboration.

When the analysis results were examined following Model 1, there appeared statistical relationship between operational competitive capabilities and organizational performance ($p < 0.05$). However, when we added the perception of organizational agility and the mediator variable in Model 2, the relationship between operational competitive capabilities and organizational performance disappeared. There is a positive relationship between organizational agility and organizational performance ($\beta = 0.418$; $p < 0.05$). We concluded that organizational agility had a full moderator effect. According to these results, H_4 was supported.

Discussion and Conclusion

Dynamic and competitive capabilities play a key role in improving healthcare organizations' activities and operations to sustain in business environment, especially in the hyperdynamic environment of the Covid-19 pandemic. Thus, many suggest that competitive capabilities are positively related to organizational agility and performance in healthcare organizations. This present study investigated the relationship between the operational competitive capabilities of healthcare organizations, their organizational performance, and the mediating role of organizational agility between operational competitive capabilities and organizational performance. To this end, four key

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hypotheses were developed and analyzed based on the data collected from healthcare organizations in Turkey. The results of the current study supported H1, H2, and H3.

This means that competitive capabilities were positively related to organizational agility and performance during the Covid-19 pandemic. Consistent with previous studies, competitive capabilities were positively related to organizational agility and organizational performance. Competitive capabilities expand the swiftness, efficiency, and effectiveness of organizational activities, which in due course braces performance (Hitt et al., 2001). This allows organizations to improve revenue by utilizing incoming opportunities and seizing operations, which in turn, leads to better competitive performance and operational competitive capability, positively affecting organizational performance (Gyemang and Emeagwali, 2020). One key contrivance through which operational competitive capabilities operates is by increasing the speed, value, and effectiveness in which the organization functions, thus giving it high performance (Drnevich and Kriauciunas, 2011). The construct of high-performance indicators demands the proper implementation of agility (Zbierowski, 2019). Thus, the strategic support of organizational entrepreneurial processes that stimulate value creation generating innovative ideas stimulates innovations and leadership in changing environment through organizational design (Dyduch, 2019). The swiftness, efficient, and effective response to the changing environment can positively impact firms' competitive performance by allowing them to gain an advantage in market operations, which leads to cost reductions. Organizations with a solid operational competitive capability can regularly sense, scan, and observe the environment and monitor activities with partners to achieve greater operational and organizational market agility. Moreover, the literature suggests that organizational agility can improve firm performance by expanding its innovation actions in the form of new products, services, or business and making rapid responses to changes (Chakravarty et al., 2013).

In our study, organizational agility had positive and significant full mediating effects on the relationship between competitive capabilities and organizational performance, which confirmed H4. Healthcare organizations can maintain their operational competitive capabilities by insisting on good service quality, innovation, and cost leadership strategy. The implementation of innovation changes deteriorated macroeconomic conditions due to the Covid-19 pandemic. This is critically important for managers to adapt to the new post-pandemic normal, which is closely related to innovation. The innovation strategies of firms and managers should help to direct public support where it can be used most effectively (Kaszowska-Mojsa, 2020). Organizational agility and competitive capabilities can be properly institutionalized in a learning-oriented environment over time. Especially during the Covid-19 pandemic process, managers of healthcare

organizations can continue their operations for a longer time by using their operational competitiveness and organizational agility at a high level. Therefore, for the quality and sustainability of institutions, leaders and managers hold a great responsibility to adapt programs and learning across the continuum of education and training during the Covid-19 pandemic (Cleland et al., 2020; McKimm et al., 2020).

Managerial Implications

Our study enriches the literature on competitive capabilities by proposing the mediating role of organizational agility between operational competitive capabilities and organizational performance in healthcare organizations.

The results of our study indicated that competitive capabilities are one of the most essential elements for increasing organizational agility and performance in Turkish healthcare organizations, so healthcare organizations should give more consideration to competitive capabilities. Besides revealing the importance of competitive skills and organizational agility in the health sector, this study enables managers to notice the situations that may require agility and the conditions of enterprises that can support perception, responsivity, and learning, but also situations that might hinder organizational agility. Moreover, we recommend that flexible organizational design and management should be applied to healthcare organizations, as it will positively affect the sustainable performance of institutions through value creation and development of right strategies. In this context, hospital managers should be able to use their competitive capabilities and seek agility to survive and adapt to the competitive environment by developing the right strategies.

Limitations and Future Research

Future studies should conduct more in-depth studies on a larger sample and consider the relationship between the above variables by using quantitative, qualitative, or mixed methods. Moreover, we recommend future research to conduct advanced studies in terms of health management perspective, hospital experience, services provided, human resources, operational capabilities, and organizational agility.

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Appendix 1:

Table 2. Confirmatory factor analysis: factor loads

Variables	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10
Competence										
A8	.827									
A7	.797									
A6	.819									
A5	.798									
A4	.829									
A3	.830									
A2	.795									
A1	.778									
Flexibility										
A11		.829								
A10		.811								
A9		.812								
Response										
A14			.911							
A13			.844							
A12			.865							
Speed										
A17				.846						
A16				.901						
A15				.815						
Innovation										
C1					.877					
C2					.899					
C3					.861					
C4					.814					

Quality of Service										
C5						.832				
C6						.793				
C7						.784				
C8						.762				
C9						.770				
Delivery										
C10							.814			
C11							.753			
Process Flexibility										
C12								.810		
C13								.868		
C14								.890		
C15								.723		
Cost Leadership										
C16									.840	
C17									.916	
C18									.919	
Organizational Performance										
P4										.710
P3										.725
P2										.841
P1										.844

Source: own elaboration.

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