Is the Organizational Structure Faculties of Sport Sciences Mechanistic or Organic?

Muhammet MAVİBAŞ^{1*}, Murat TURAN¹, Buğra Çağatay SAVAŞ¹

¹Erzurum Technical University, Faculty of Sport Sciences, Erzurum, Türkiye

Original Article Received: 02.01.2025

Accepted: 28.03.2025

DOI: 10.47778/ejsse.1611838 Online Published: 31.03.2025

Abstract

The aim of this study was to examine the perceptions of academic staff working at Faculties of Sports Sciences regarding their institutions' organizational structures and to classify these structures as mechanistic or organic. The theoretical foundation of this research is based on Burns and Stalker's organizational classification model, highlighting that organizational effectiveness can significantly vary according to structural characteristics in dynamic fields such as sports sciences. The theoretical rationale for this study arises from the need to better understand how organizational structures impact the adaptability and innovation capacity of academic institutions in response to rapid developments and interdisciplinary demands within the field of sports sciences. Data were collected from 332 academic staff across various sports sciences faculties in Turkey using the "Organizational Structure Scale–University Version." Data were collected in 2024. The analysis indicated that academic staff predominantly perceive their institutions as having a mechanistic structure characterized by high levels of complexity, centralization, and formalization, along with lower levels of stratification. These findings provide significant theoretical contributions by highlighting the prevalence of mechanistic structures that may affect academic creativity, organizational effectiveness, and adaptability in a rapidly evolving academic discipline. Therefore, this study emphasizes the necessity of transitioning toward more organic and flexible organizational models to promote innovation, interdisciplinary collaboration, and institutional responsiveness, thus potentially contributing substantially to the literature on organizational theory in sports sciences.

Keywords: Faculty of Sport Sciences, Organizational structure, Mechanical and organic organization

Spor Bilimleri Fakültelerinde Organizasyon Yapısı Mekanik mi, Organik mi?

Öz

Bu çalışmanın amacı, Spor Bilimleri Fakültelerinde görev yapan akademik personelin kurumlarının örgütsel yapılarına ilişkin algılarını incelemek ve bu yapıları mekanistik veya organik olarak sınıflandırmaktır. Araştırmanın teorik temeli, Burns ve Stalker'ın örgütsel sınıflandırma modeline dayanmakta olup, spor bilimleri gibi dinamik alanlarda örgütsel etkinliğin, yapısal özelliklere göre önemli ölçüde farklılık gösterebileceği vurgulanmaktadır. Araştırmanın teorik gerekçesini, spor bilimleri alanında hızlı gelişmelerin ve disiplinler arası taleplerin ortaya çıkardığı değişimlere kurumların uyum sağlama ve yenilikçilik kapasiteleri üzerinde örgütsel yapıların etkisini daha iyi anlamak oluşturmuştur. Türkiye genelindeki çeşitli spor bilimleri fakültelerinde görev yapan 332 akademik personelden "Örgütsel Yapı Ölçeği–Üniversite Versiyonu" kullanılarak veri toplanmıştır. Veriler 2024 yılında toplanmıştır. Yapılan analiz sonucunda akademik personelin kurumlarını ağırlıklı olarak mekanistik yapıda algıladıkları; yüksek düzeyde karmaşıklık, merkezileşme ve biçimselleşmenin yanı sıra düşük düzeyde tabakalaşma özelliklerinin öne çıktığı belirlenmiştir. Bu bulgular, hızla gelişen bir akademik disiplinde, mekanistik yapıların yaygınlığının akademik yaratıcılık, örgütsel etkinlik ve uyum sağlama becerilerini nasıl etkileyebileceğine yönelik önemli teorik katkılar sunmaktadır. Dolayısıyla bu çalışma, yenilikçiliği, disiplinler arası iş birliğini ve kurumsal duyarlılığı teşvik etmek için daha organik ve esnek örgütsel modellere geçişin gerekliliğini vurgulayarak spor bilimleri alanındaki örgüt teorisi literatürüne önemli bir katkı sağlayacağı düşünülmektedir. **Anahtar kelimeler**: Spor Bilimleri Fakültesi, Örgütsel yapı, Mekanik ve organik örgüt

^{*} Corresponding Author: Muhammet MAVİBAŞ, E-Mail: muhammet.mavibas@erzurum.edu.tr

INTRODUCTION

To understand organizational structure, it is essential to first focus on the concept of an organization. An organization can be defined as a community of individuals brought together to achieve a common goal. In this context, establishing an organizational structure requires arrangements related to fundamental activities, analysis of personnel and tasks, and coordination of their interrelations (Koçel, 2018). Thus, organizational structure pertains to the arrangement of tasks and operations within institutions and organizations to accomplish predetermined core missions, assigning personnel to specific positions and roles, and organizing the relationships among these positions (Özcan, 2010). Simply put, structure refers to the form of the units that constitute an organization and the relationships among these units (İçerli, 2009). When creating an organizational structure, activities and division of labor within the organization, the levels of expertise required for the tasks, management style, coordination methods, and the functions of the organization must be evaluated from a holistic perspective (Altunay, 2006).

Mintzberg (2015) explains organizational structure types based on fundamental coordination mechanisms, types of decentralization, and differentiation of the organization's core unit. These structure types are as follows:

- The Simple Structure: Also referred to as the "entrepreneurial organization," this structure is characterized by high levels of direct supervision and centralization, with minimal complexity and few hierarchical layers (Hoy & Miskel, 2015; Robbins & Judge, 2017).
- The Machine Bureaucracy: This structure is distinguished by standardized work processes, formal communication channels, and a hierarchical authority framework. It features high centralization and formality (Hoy & Miskel, 2015; Weber, 1947).
- The Professional Bureaucracy: Combining both horizontal and vertical decentralization with standardization, this structure relies on knowledge and expertise as the foundation of authority. In this model, the skills and knowledge acquired during professionals' training are of significant importance (Hoy & Miskel, 2015; Lunenburg & Ornstein, 2013).
- The Divisionalized Form: As organizations grow, they may establish divisions based on geography, product, or function. These divisions operate autonomously while overall policies and strategies are set by the top strategic management (Lunenburg & Ornstein, 2013; Mintzberg, 1979, 1993).
- The Adhocracy: This highly organic structure is characterized by low formalization and a horizontal hierarchy. Specialists collaborate on innovative projects, with mutual adjustment serving as the primary coordination mechanism (Lunenburg & Ornstein, 2013; Mintzberg, 1993).

The classification of organic and mechanistic organizational structures is one of the frequently cited classifications in the literature, developed by Burns and Stalker (1968). Through their examination of twenty industrial firms in England, Stalker and Burns observed a connection between the existing organizational structure and the external environment influencing the

organization. They found that when the external environment is stable and static, organizations exhibit a high level of formalization, implement standardized rules and procedures, and maintain a clear hierarchy of authority. In such structures, decision-making is concentrated at the upper levels of management, resulting in a high degree of centralization. Burns and Stalker (1968) defined these types of structures as *mechanistic organizational structures* (as cited in Daft, 2010).

Mechanistic Organization	Organic Organization
High specialization	Cross-functional teams
Rigid departmentalization	Cross-hierarchical teams
Clear chain of command	Flexible flow of information
Narrow span of control	Wide span of control
Centralization	Decentralization
High formalization	Low formalization

Table 1. Comparison of mechanistic and organic organizations

Robbins & Judge, (2013)

Tom Burns and G.M. Stalker (1968), in their comparative analyses of organizational structures, argued that under continuously changing environmental conditions, there cannot be a single "best" organizational structure. Their research highlighted the appropriateness of aligning organizational structures with dynamic environmental conditions. Accordingly, they emphasized that mechanistic structures are more suitable for stable environments, whereas organic structures are better suited for variable and dynamic environments. They advised managers to consider these factors when shaping organizational structures (as cited in Koçel, 2018).

When examining some studies in the literature regarding organizational structure, Yıldırım (2014) states that schools generally exhibit an organic organizational structure characterized by low specialization and centralization, and high formalization. However, he also notes that certain legal regulations may negatively affect job satisfaction. Similarly, Alanoğlu and Demirtaş (2020) found that a bureaucratic (enabling) structure positively relates to school principals' collaborative management style, whereas a hindering structure positively relates to authoritarian and indifferent management styles.

Alavi et al. (2014) indicated that decentralization and flat structures within organic organizations enhance workforce agility, while organizational learning also positively impacts agility. Agbim (2013) argues that organic structures are more effective in generating innovative ideas, whereas mechanistic structures facilitate the implementation of these ideas, emphasizing the influential role of leadership styles during these processes. Kessler et al. (2017) noted that organic structures support innovation and employee satisfaction, while mechanistic structures focus on clear role definitions and hierarchy. Sine et al. (2006) argued that mechanistic structures are beneficial for performance in the initial phases of new ventures.

Aksay (2015) highlighted the evolution of organizational structures towards horizontal configurations and emphasized the prominence of modern organization types such as network,

virtual, and learning organizations. Bozkuş (2016) pointed out that flexible structures in educational institutions contribute positively to educational quality.

In conclusion, organic structures support innovation, collaboration, and agility, whereas mechanistic structures provide advantages in clarity of roles and implementation processes. The selection of an organizational structure should consider the environmental conditions of the institutions.

In this context, examining the perceptions of organizational structures among academics in faculties of sports sciences can contribute to identifying the most appropriate organizational configuration tailored to the requirements of this unique and dynamic field. The comparative analysis of mechanistic and organic organizational structures, as defined by Burns and Stalker, holds significant importance, particularly given the rapidly evolving nature of the sports sciences field and its demand for interdisciplinary interactions. This field is influenced by rapid technological advancements, evolving sports policies, and innovative training methodologies.

This study was conducted to determine whether organizational structures in faculties of sports sciences are perceived as mechanistic or organic by academic staff. Due to the interdisciplinary nature and rapidly evolving environment of sports sciences, the impact of organizational structures on innovation, academic performance, and adaptability is critically important. Therefore, it is essential to identify and improve existing structures through this research. Previous literature suggests that organic structures promote innovation, collaboration, and flexibility, whereas mechanistic structures offer advantages in clear role definitions and task implementation. Studies in educational institutions emphasize that organic structures enhance participation and success, while mechanistic structures may reduce creativity and motivation.

The scientific rationale for this research is that organizational structures within faculties of sports sciences directly influence academics' working environments, innovative thinking capacity, and institutional adaptability to changing conditions. Findings from this study will contribute uniquely to sports management literature by providing scientific recommendations for adopting more innovative and flexible management models. Additionally, analyzing academics' perceptions of organizational structures will form a foundation for future research in this area. The significance of this study lies in highlighting the effects of organizational structures on academic productivity, creativity, and innovation within the dynamic context of sports sciences. Its innovative aspect is the comparative examination of mechanistic and organic structures specifically within the sports sciences context, offering a fresh perspective to the existing literature. Theoretically, it provides new insights into the impacts of these structures within sports sciences. Practically, it offers concrete recommendations for administrators aiming to enhance organizational effectiveness and improve academic working environments.

METHOD

Research Model

This research was designed in descriptive and relational survey model among quantitative research methods.

Research Groups

The study population consists of academic staff working in faculties of sports sciences across Turkey in 2024. The sample group includes 332 academic staff members selected for the study.

Data Collection Tools

Data were collected using the following tools:

A **Personal Information Form**, developed by the researchers, was used to gather demographic information about the participants.

The **Organizational Structure Scale**—**University Version**, adapted into Turkish by Erol and Ordu (2018), was used to assess the organizational structure of faculties of sports sciences. This scale consists of 27 items distributed across four dimensions: complexity, centralization, formalization, and stratification.

- The *complexity dimension* includes three subdimensions: functional specialization, professional training, and professional activities.
- The *centralization dimension* comprises two subdimensions: participation in decisionmaking and hierarchy of authority.
- The *formalization dimension* includes two subdimensions: standardization and professional dimension.
- The *stratification dimension* consists of two subdimensions: differences in rewards and differences in status.

Ethical Approval

The ethical compliance of this study was approved by the Sub-Ethics Committee of the Faculty of Sport Sciences, Atatürk University, with decision number 169, dated 25 October 2023.

Data Collection

The personal information form and scales used in the study were created as an e-survey using Google Forms. Subsequently, institutional email addresses of academics working in Facuties of Sport Sciences in Turkey were collected from the Türkiye Republic Counsil of Higher Education Academic Portal, and the survey link was sent to gather data. The data were collected in 2024.

Analysis of Data

- Demographic data of the participants were analyzed using **frequency analysis**.
- Descriptive statistics were applied to determine the mean scores obtained from the scales and subdimensions.

• The study sought to identify the organizational structure (mechanistic or organic) based on the components of organizational structure: complexity, centralization, formalization, and stratification. This determination was based on Burns and Stalker's (1961) organizational classification.

A measurement scale was developed that features 16 different models ranging from a fully mechanistic organization to a fully organic organization, based on variations in structural component scores (Erol & Ordu, 2018). On this scale, progression from model 1 to model 16 indicates a shift from mechanistic to organic organizational structure. These models were created based on literature insights. Pearson correlation analysis was conducted to determine the relationship between the overall average score of organizational structure and its subdimensions.

FINDINGS

		n	%
Condon	Male	224	67,5
Gender	Female	108	32,5
Administrative Dele	Yes	104	31,3
Administrative Role	No	228	68,7
	Lecturer	33	9,9
	Research Assistant	43	13,0
Academik Title	Assistant Professor	92	27,7
	Associate Professor	112	33,7
	Professor	52	15,7
	Less than 1 year	47	14,2
	1-5 years	62	18,7
Professional Seniority	6-10 years	76	22,9
	11-15 years	60	18,1
	16 years or more	87	26,1
	Less than 1 year	58	17,6
	1-5 years	97	29,2
Institutional Seniority	6-10 years	69	20,8
	11-15 years	46	13,8
	16 years or more	62	18,6
	Total	332	100

Table 2. Demographic variables of the participants

An analysis of the demographic characteristics of the participants showed that 224 individuals (67.5%) were male, while 108 (32.5%) were female. Regarding administrative roles, 104 participants (31.3%) held administrative positions, whereas 228 (68.7%) did not. In terms of academic titles, the lowest representation was among Lecturers (33 participants, 9.9%), while the highest representation was among Associate Professors (112 participants, 33.7%). For professional seniority, 47 participants (14.2%) had less than one year of experience, whereas 87 participants (26.1%) had 16 years or more. Regarding institutional seniority, the smallest group comprised those with 11–15 years of experience (46 participants, 13.8%), while the largest group consisted of those with 1–5 years of experience (97 participants, 29.2%).

Mavibas, M., Turan, M., & Savaş, B. Ç. (2024). Is the Organizational structure Faculties of Sport Sciences mechanistic or organic?. *Eurasian Journal of Sport Sciences and Education*, 7(1), 131-146.

Scale and Dimensions	Subdimensions	n	Min.	Max.	Mean (Ā)	S.
	Number of Occupational Specialties	332	1,00	5,00	3,08	0,99
Complanity	Professional Training	332	1,00	5,00	3,48	0,87
Complexity	Professional Activities	332	1,00	5,00	3,09	0,91
	General	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	0,70			
	Participation in Decisions	332	1,00	5,00	3,22	1,02
Centralization	Hierarchy of Authority	332	1,00	5,00	3,74	0,98
	General	name na name name	0,87			
	Standardization	332	1,00	5,00	3,71	1,02
Formalization	Professional Latitude	332	1,00	5,00	3,51	0,89
	General	332	1,00	4,83	3,61	0,78
	Difference in Rewards	332	1,33	5,00	3,49	0,85
Stratification	Difference between status	332	1,00	5,00	4,01	0,81
	General	332	1,33	5,00	3,75	0,74
Organizational Structure	General	332	2,35	4,38	3,48	0,46

Table 3. Participants' mean scores on the organizational structure scale and subdimensions

An analysis of the participants' mean scores on the dimensions and subdimensions of the organizational structure scale reveals that the Complexity dimension had a general mean score of 3.21 (SD = 0.70), categorized as "moderate," while the Centralization dimension had a general mean score of 3.48 (SD = 0.87), also categorized as "moderate." The Formalization dimension had a general mean score of 3.61 (SD = 0.78), categorized as "high," and the Stratification dimension had a general mean score of 3.75 (SD = 0.74), also categorized as "high." The overall perception of Organizational Structure was determined to have a mean score of 3.48 (SD = 0.46), categorized as "high." These findings suggest that participants' perceptions of organizational structure align more closely with mechanistic organizational characteristics, emphasizing standardized processes, clear hierarchies, and formalized procedures.

	Complexity	Centralization	Formalization	Stratification
	Score	Score	Score	Score
1. Group (Less than 1 year)	32 (+)	22 (+)	22 (+)	22 (+)
2. Group (1–5 years)	29 (+)	21 (+)	22 (+)	22 (+)
3. Group (6–10 years)	28 (+)	20 (+)	21 (+)	24 (+)
4. Group (11–15 years)	26 (+)	19 (+)	19 (+)	24 (+)
5. Group (16 years or more)	31 (+)	21 (+)	23 (+)	23 (+)

Table 4. Mean scores of organizational structure dimensions based on participants' institutional tenure

Complexity: $9 \le \text{Low/Reserved}(-) \le 22.5 \le \text{High/Dominant}(+) \le 45$

Centralization, Formalization, Stratification: $6 \le Low/Reserved$ (-) < 15 < High/Dominant (+) ≤ 30

In the study, to determine whether the academic staff perceived the organizational structure of their faculty as closer to an organic or mechanistic structure, the mean scores of participants divided into five groups based on their institutional tenure were compared according to the scale value ranges. It was found that all dimensions were high (dominant+).

	Measurement Model																	
Organizational Structure Component		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Complexity		-	+	-	-	+	+	-	-	+	-	-	+	+	+	+	-	
Centralization		+	+	-	+	-	+	+	-	+	+	-	-	+	-	-	-	
Formalization		+	+	+	-	+	+	+	-	-	-	+	-	-	+	-	-	
Stratification		+	+	+	+	+	-	-	+	+	-	-	+	-	-	-	-	
	Mechanistic	-															•	Organic
	Organization	•															-	Organization

Table 5. Evaluation of participants' perception scores of their faculty's organizational structure based on institutional tenure

An important finding derived from the scale is the determination of the organization's structure based on the high or low scores of organizational structure components—complexity, centralization, formalization, and stratification—using Burns and Stalker's (1961) organizational classification as a foundation. Based on different score combinations of these structural components, 16 different measurement models have been developed and arranged on a scale ranging from mechanistic to organic organization (Erol & Ordu, 2018). These 16 different models can be derived from the subdimension scores, enabling researchers to identify the approximate position of the institution being evaluated on the "mechanistic-organic organization scale" through the applied scale. In Hage's (1967) Axiology Theory, total scores can be obtained for each dimension: complexity, centralization, formalization, and stratification. Researchers classify scores below the midpoint as low/reserved (-) and those above the midpoint as high/dominant (+). This approach results in the emergence of 16 different ideal organizational structure types, or measurement models.

In light of this information, when Table 5 is examined, it is observed that all organizational structure scale dimensions for participants with different levels of institutional tenure have high/dominant (+) values. According to these results, the measurement model corresponds to the second column. Thus, it can be concluded that the organizational structure perceptions of academic staff with varying institutional tenure in faculties of sports sciences align with a mechanistic organizational structure.

		Complexity	Centralization	Formalization	Stratification	OS General Average
	Pearson Corr.	1	,618**	,569**	-,306**	,853**
Complexity	р		< 0.001	< 0.001	< 0.001	< 0.001
	n	332	332	332	332	332
	Pearson Corr.	,618**	1	,597**	-,419**	,791**
Centralization	р	,000,		< 0.001	< 0.001	< 0.001
	n	332	332	332	332	332
	Pearson Corr.	,569**	,597**	1	-,314**	,761**
Formalization	р	< 0.001	< 0.001		< 0.001	< 0.001
	n	332	332	332	332	332
	Pearson Corr.	-,306**	-,419**	-,314**	1	-,080
Stratification	р	< 0.001	< 0.001	< 0.001		,148
	n	332	332	332	332	332
OS Conoral	Pearson Corr.	,853**	,791**	,761**	-,080	1
Average	р	< 0.001	< 0.001	< 0.001	,148	
Average	n	332	332	332	332	332

Table 8. Relationships between organizational structure scale subdimensions and overall average

**; p<0.001

According to the table, a positive and moderate correlation was found between organizational structure (OS) complexity and centralization (r = 0.618, p < 0.001) as well as formalization (r = 0.569, p < 0.001), indicating that an increase in complexity is associated with an increase in centralization and formalization. Additionally, there is a negative and low-level correlation between complexity and stratification (r = -0.306, p < 0.001), showing that as complexity increases, stratification decreases. OS complexity also has a strong positive correlation with the overall average (r = 0.853, p < 0.001).

A moderate positive relationship was also found between OS centralization and formalization (r = 0.597, p < 0.001), suggesting that higher levels of centralization are associated with increased formalization. Centralization has a negative and moderate correlation with stratification (r = -0.419, p < 0.001), indicating that an increase in centralization corresponds to a decrease in stratification. OS centralization exhibits a very strong positive correlation with the overall average (r = 0.791, p < 0.001).

There is a negative and moderate correlation between OS formalization and stratification (r = -0.314, p < 0.001), meaning that as formalization increases, stratification decreases. Formalization also shows a strong positive correlation with the overall average (r = 0.761, p < 0.001), suggesting that a more formal structure positively influences the overall perception.

No significant correlation was found between OS stratification and the overall average (r = -0.080, p = 0.148), indicating that stratification does not have a significant impact on the general organizational perception. These findings suggest that most organizational structure components are positively correlated and have a significant impact on overall perception, while stratification appears to be influenced differently within this dynamic.

DISCUSSION AND CONCLUSION

This study aims to determine the perceptions of academic staff working in faculties of sports sciences regarding the organizational structure of their institutions. Additionally, the average scores obtained from the dimensions and subdimensions of organizational structure were also analyzed.

According to the results, the perceptions of academic staff regarding complexity and centralization were found to be at a "moderate" level, while their perceptions of formalization and stratification were at a "high" level. The overall perception of the organizational structure was also determined to be "high." This indicates that academic staff perceive the tasks and decision-making processes as neither overly simple nor overly complex, but they feel that rules and hierarchies are quite rigid. While academic staff seem generally satisfied with the organizational structure, the high levels of formalization and stratification may have negative effects on creativity and academic freedom,

suggesting the need for careful attention. In this context, steps to increase organizational flexibility and encourage the participation of academics are recommended. The alignment of the subdimension and general averages at high levels suggests a perception of a mechanistic organizational structure. In other words, the higher the average scores, the more mechanistic the perceived structure.

A comparison was made based on institutional tenure to determine whether academic staff perceived the organizational structure as mechanistic or organic. The purpose of this test stems from the assumption that time spent in the institution provides more insight into perceptions of organizational structure. According to the analysis results in Table 4, it was observed that all tenure groups perceived their institutions as having a mechanistic organizational structure. Mechanistic organizational structures typically represent a centralized, hierarchical, rule-driven, and rigid management approach. These structures provide an environment where decision-making processes are standardized, and individual initiative is limited. The results reveal no significant difference in this perception based on tenure, indicating that the overall management style, culture, and functioning of the organization play a more decisive role than individual experiences.

The findings also suggest that perceiving institutions as having a mechanistic organizational structure could lead to some disadvantages for employees. Academic environments require flexible and organic structures that promote innovation, adaptation, and individual creativity. The rigidity of mechanistic structures could negatively affect employee satisfaction and motivation. Therefore, evolving organizational structures toward a more flexible, participatory, and collaborative model could be an important step in improving academic success and employee satisfaction.

When examining the research conducted on organizational structure, Hage and Aiken (1967) found that high levels of centralization and formalization in organizations were associated with increased alienation from tasks and relationships. On the other hand, Miskel (1979), in his study examining the relationship between perceived organizational effectiveness, organizational loyalty, job satisfaction, and organizational structure, found that schools perceived as more effective by teachers had more participatory organizational processes, less centralized decision-making structures, more formalized general rules, and more complex, highly specialized activities. Similarly, Jackson (2007b), in his study examining the relationship between shared decision-making perceptions of principals working in primary schools and the structural features of their schools (centralization, formalization, and complexity), found that principals perceived their schools as more formal and complex but less centralized. Schools where teachers participated in decision-making processes were perceived as less centralized, and schools where teachers wanted to participate in decision-making processes were perceived as more formal. He also found no significant relationship between centralized organizational structures and shared decision-making.

In other research on organizational structure, studies conducted in businesses have focused on measuring organizational structure characteristics (complexity, centralization, and formalization)

(Ambrose & Schminke, 2003; Hage & Aiken, 1967; Pheysey et al., 1971), while studies conducted in educational institutions have generally examined the bureaucratic structure of schools (Adams, 2003; Anderson, 2012; Beard et al., 2010; Brandy, 2008; George & Bishop, 1971; Gage, 2003; Guldan, 2004; Jackson, 2007a; Lennon, 2010; Mayerson, 2010; McGuigan, 2005; McGuigan & Hoy, 2006; McVey, 2009; Messick, 2012; Miskel, 1979; Okpogba, 2011; Rhoads, 2009; Sinden et al., 2004; Spinella, 2003; Sweetland, 2001; Volk, 2011; Watts, 2009; William, 1981).

Stinchcombe (1965) noted that formalization and specialization enhance performance in new ventures. Hage and Aiken (1967) reported that high centralization and formalization increase employee alienation. Mintzberg (1979) argued that organic structures are preferable in highly uncertain environments. Miskel (1979) found schools with participatory decision-making processes and lower centralization to be perceived as more effective by teachers. Meadows (1980) observed that organic structures increase job satisfaction, while Perrow (1986) identified structured roles as performance-enhancing.

Covin and Slevin (1988, 1989) emphasized that decentralized decision-making aligns with innovative strategies. Bourgeois et al. (1978) observed increased mechanistic structures under uncertainty due to control needs, and Cott (1997) found organic structures effective for problem-solving teams and mechanistic structures effective for implementation teams. Jogaratnam and Tse (2006) argued that organic structures might negatively impact performance in certain cultural contexts, whereas Jackson (2007b) indicated that schools with high teacher participation in decision-making processes are perceived as less centralized.

Ahrens and Chapman (2004) and Raisch (2008) suggested that a combination of mechanistic and organic elements can enhance performance. Sine et al. (2006) found that mechanistic structures are beneficial during the initial phases of new ventures. Dickson et al. (2006) indicated that organic structures foster diverse employee behaviors, and Skaggs and Galli-Debicella (2012), Müller and Martinsuo (2015) highlighted that organic structures improve customer service effectiveness and project performance. Csaszar (2012) reported decentralized structures as more error-resistant and accepting of projects.

Alavi et al. (2014) concluded that organic structures enhance workforce agility through decentralized decision-making, and Kessler et al. (2017) found that organic structures boost innovation and employee satisfaction. Wilden et al. (2013) demonstrated increased productivity under dynamic conditions within organic structures. In conclusion, to enhance academic freedom, creativity, and employee satisfaction, faculties should adopt more participatory and flexible management models. Reducing formalization and stratification could eliminate bureaucratic barriers, fostering innovation and creativity, and thus improving both academic performance and institutional satisfaction.

When examining the perceptions of academics working in faculties of sports sciences regarding organizational structure, a positive relationship was found between complexity and centralization

and formalization. This indicates that more complex structures require a more centralized and formal organizational design. A negative relationship was found between complexity and stratification, indicating that as complexity increases, hierarchical structures become flatter. Additionally, a strong positive relationship was found between organizational structure complexity and overall perception, showing that complex structures are perceived more positively.

A positive relationship was found between centralization and formalization, indicating that centralization increases formalization to ensure consistency. However, a negative relationship was found between centralization and stratification, suggesting that less hierarchical layers are preferred in more centralized structures. A strong positive relationship was found between centralization and overall perception, indicating that centralization contributes to efficiency and clarity.

A negative relationship was identified between formalization and stratification, indicating that formalization flattens hierarchies. Formal structures positively influenced overall perception, likely due to clear rules and standards reducing uncertainty and improving organizational perception. On the other hand, no significant relationship was found between stratification and overall perception, suggesting that hierarchical structures do not directly affect employees' perceptions.

In conclusion, while complexity, centralization, and formalization were found to positively influence overall perceptions of organizational structure, stratification appeared to function differently within these dynamics. This study revealed that academic staff working in Faculties of Sport Sciences in Turkey predominantly perceive their institutions as having mechanistic organizational characteristics. High levels of centralization, formalization, and stratification indicate the dominance of hierarchical systems, rule-based procedures, and limited participation in decision-making processes. Although such structures may ensure a certain level of order and control, they can be restrictive in dynamic and interdisciplinary fields such as sport sciences, where innovation, flexibility, and academic productivity are essential. The findings suggest that a transition toward more organic organizational models—emphasizing participative decision-making, horizontal communication, and decentralization—could significantly enhance both academic satisfaction and institutional agility. Therefore, it is recommended that current organizational structures in sport sciences faculties be critically re-evaluated to foster a more innovative, adaptive, and sustainable academic governance approach.

Based on the results, some suggestions can be made to increase organizational flexibility and promote academic freedom. Faculties can adopt more participatory and flexible management models to allow academic staff greater involvement in decision-making processes. Additionally, by reducing formalization and stratification levels, faculties can remove bureaucratic barriers to innovative and creative work. These changes could increase job satisfaction among academic staff and strengthen organizational commitment. Through such structural changes, faculties could enhance both academic performance and institutional satisfaction.

Mavibas, M., Turan, M., & Savaş, B. Ç. (2024). Is the Organizational structure Faculties of Sport Sciences mechanistic or organic?. *Eurasian Journal of Sport Sciences and Education*, 7(1), 131-146.

Funding: This research received no external funding

Conflicts of Interest: The authors declare that they have no conflict of interest.

Authors' Contribution: All authors contributed equally to the study.

Ethical Approval: Ethics Committee: Sub-Ethics Committee of the Faculty of Sports Sciences, Atatürk University Date/Decision Number: 25/10/2023 / 169-2023

REFERENCES

- Adams, C. M. (2003). *The effects of school structure and trust on collective teacher efficacy*. (Doctoral dissertation). Oklahoma State University.
- Agbim, K. C. (2013). The impact of organizational structure and leadership styles on innovation. IOSR Journal of Business and Management, 6(6), 56-63. <u>https://doi.org/10.9790/487X-0665663</u>
- Ahrens, T., & Chapman, C. S. (2004). Accounting for flexibility and efficiency: A field study of management control systems in a restaurant chain. *Contemporary Accounting Research*, 21(2), 271–301. <u>https://doi.org/10.1506/VJR6-RP75-7GUX-XH0X</u>
- Aksay, K. (2015). Örgüt yapılarında yaşanan değişimler ve modern örgüt tiplerinin incelenmesi. *Kent Akademisi*, 8(3),111-128.
- Alanoğlu, M., & Demirtaş, Z. (2020). Bürokratik okul yapısı ile müdür yönetim tarzları arasındaki ilişkilerin incelenmesi. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, 48, 199-213. <u>https://doi.org/10.9779/pauefd.560610</u>
- Alavi, S., Abd. Wahab, D., Muhamad, N., & Arbab Shirani, B. (2014). Organic structure and organisational learning as the main antecedents of workforce agility. *International Journal of Production Research*, 52(21), 6273-6295. <u>https://doi.org/10.1080/00207543.2014.919420</u>
- Altunay, Ö. (2006). Örgüt yapısındaki değişimlerin örgüt kültürü üzerindeki etkilerinin belirlenmesine yönelik bir araştırma. (Yüksek lisans tezi), Dumlupınar Üniversitesi, Sosyal Bilimler Enstitüsü, Kütahya.
- Ambrose, M. L., & Schminke, M. (2003). Organization structure as a moderator of the relationship between procedural justice, interactional justice, perceived organizational support, and supervisory trust. *Journal of Applied Psychology*, 88(2), 295–305. <u>https://doi.org/10.1037/0021-9010.88.2.295</u>
- Anderson, K. (2012). *Examining relationships between enabling structures, academic optimism, and student achievement* (Unpublished doctoral dissertation). Auburn University.
- Beard, K. S., Hoy, W. K., & Hoy, A. W. (2010). Academic optimism of individual teachers: Confirming a new construct. *Teaching and Teacher Education*, 26(5), 1136-1144. <u>https://doi.org/10.1016/j.tate.2010.02.003</u>

- Bourgeois, L. J., McAllister, D. W., & Mitchell, T. R. (1978). The effects of different organizational environments upon decisions about organizational structure. *Academy of Management Journal*, 21(3), 508–514. https://doi.org/10.5465/255732
- Bozkuş, K. (2016). Örgüt yapısı ve okullar. Kesit Akademi Dergisi, 2(4), 236-260.
- Brandy, D. A. (2008). *The effect of school organizational structure on professional development transfer of training* (Doctoral dissertation). Oakland University.
- Burns, T., & Stalker, G. M. (1968). *The management of innovation*. Associated Book Publishers. https://doi.org/10.1093/acprof:oso/9780198288787.001.0001
- Covin, J. G., & Slevin, D. P. (1988). The influence of organization structure on the utility of an entrepreneurial top management style. *Journal of Management Studies*, 25(3), 217–234. <u>https://doi.org/10.1111/j.1467-6486.1988.tb00033.x</u>
- Csaszar, F. A. (2012). Organizational structure as a determinant of performance: Evidence from mutual funds. *Strategic Management Journal*, 33(6), 611–632. <u>https://doi.org/10.1002/smj.1969</u>
- Daft, R. L., Murphy, J., & Willmott, H. (2010). Organization theory and design. Nelson Education Ltd.
- Dickson, M. W., Resick, C. J., & Hanges, P. J. (2006). Systematic variation in organizationally-shared cognitive prototypes of effective leadership based on organizational form. *The Leadership Quarterly*, 17(5), 487–505. <u>https://doi.org/10.1016/j.leaqua.2006.07.005</u>
- Erol, E., & Ordu, A. (2018). Organizational structure scale–University version. European Journal of Educational Research, 7(4), 775-803. <u>https://doi.org/10.12973/eu-jer.7.4.775</u>
- Gage III, C. Q. (2003). *The meaning and measure of school mindfulness: An exploratory analysis*. The Ohio State University.
- George, J. R., & Bishop, L. K. (1971). Relationship of organizational structure and teacher personality characteristics to organizational climate. *Administrative Science Quarterly*, *16*(4), 467–475. <u>https://doi.org/10.2307/2391766</u>
- Guldan, E. A. (2004). Enabling bureaucracy, faculty trust, and collective efficacy in selected catholic elementary schools. St. John's University (New York).
- Hage, J., & Aiken, M. (1967). Relationship of centralization to other structural properties. Administrative Science Quarterly, 12(1), 72–92. <u>https://doi.org/10.2307/2391213</u>
- Hoy, W. K., & Miskel, C. G. (2015). *Eğitim yönetimi: Teori, araştırma ve uygulama* (S. Turan, Çev.). Nobel Yayın Dağıtım.
- İçerli, L. (2009). Örgüt yapısı ve örgütsel adalet arasındaki ilişkiler (Yayınlanmamış doktora tezi). Dokuz Eylül Üniversitesi, Sosyal Bilimler Enstitüsü, İzmir.
- Jackson, C. K. (2007a). A little now for a lot later: A look at a Texas Advanced Placement incentive program. *Journal* of Human Resources, 42(3), 591–639. <u>https://doi.org/10.3368/jhr.45.3.591</u>

- Jackson, J. M. (2007b). An examination of the relationship between elementary school principals' perceptions of shared decision making and three organizational structures (Doctoral dissertation). Wayne State University.
- Jogaratnam, G., & Tse, E. C. Y. (2006). Entrepreneurial orientation and the structuring of organizations: Performance evidence from the Asian hotel industry. *International Journal of Contemporary Hospitality Management*, 18(6), 454–468. <u>https://doi.org/10.1108/09596110610681502</u>
- Kessler, S. R., Nixon, A. E., & Nord, W. R. (2017). Examining organic and mechanistic structures: Do we know as much as we thought? *International Journal of Management Reviews*, 19(4), 531–555. https://doi.org/10.1111/ijmr.12109
- Koçel, T. (2018). İşletme yöneticiliği (17. baskı). Beta Yayıncılık.
- Lennon, P. A. (2010). *The Relationship of bureaucratic structure to school climate: An exploratory factor Analysis of Construct Validity*. ProQuest LLC. 789 East Eisenhower Parkway, PO Box 1346, Ann Arbor, MI 48106.
- Lunenburg, F. C., & Ornstein, O. C. (2013). Eğitim yönetimi (G. Arastaman, Çev.). Nobel Yayıncılık.
- Mayerson, D. (2010). The relationship between school climate, trust, enabling structures, and perceived school effectiveness (Unpublished doctoral dissertation). St. John's University.
- McGuigan, L. (2005). *The role of enabling bureaucracy and academic optimism in academic achievement growth* (Unpublished doctoral dissertation). The Ohio State University, Columbus, Ohio.
- McGuigan, L., & Hoy, W. K. (2006). Principal leadership: Creating a culture of academic optimism to improve achievement for all students. *Leadership and Policy in Schools*, 5(3), 203-229. https://doi.org/10.1080/15700760600805816
- McVey, D. (2009). Parsonian influence and the effect of school climate and bureaucracy on the perceived effectiveness in schools (Unpublished doctoral dissertation). St. John's University, Jamaica, New York.
- Mintzberg, H. (1979). The structuring of organizations: A synthesis of the research. Prentice-Hall.
- Mintzberg, H. (1993). Structure in fives: Designing effective organization. Prentice-Hall, International Editions.
- Mintzberg, H. (2015). Örgütler ve yapıları (A. Aypay, Çev. Ed.). Nobel Yayıncılık.
- Miskel, C. (1979). *Demographic characteristics, faculty attitudes, and school structure*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, United States, April 8–12.
- Miskel, C. G. (1979). Organizational structures for schools. Educational Administration Quarterly, 15(3), 97-118.
- Okpogba, D. (2011). Organizational structure, collegial trust, and college faculty teaching efficacy: A case study (Unpublished doctoral dissertation). Oklahoma State University, Oklahoma.
- Özcan, E. D. (2010). Algılanan örgüt yapısı ile iş tatmini arasındaki ilişkide kişilik özelliklerinin rolü ve bir araştırma (Yayınlanmamış doktora tezi). Marmara Üniversitesi, İstanbul.

- Pheysey, D. C., Payne, R. L. & Pugh, D. S. (1971). Influence of structure at organizational and group levels. Administrative Science Quarterly, 16(1), 61-73. <u>https://doi.org/10.2307/2391289</u>
- Rhoads, D. (2009). *Enabling structure and collective efficacy: A study of teacher perceptions in elementary divisions of American schools in Mexico* (Unpublished doctoral dissertation). Seton Hall University, New Jersey.
- Robbins, S. P., & Judge, T. A. (2013). Örgütsel davranışın temelleri (İ. Erdem, Çev.). Nobel Yayıncılık.
- Robbins, S. P., & Judge, T. A. (2017). Örgütsel davranışın temelleri (İ. Erdem, Çev.). Nobel Yayın Dağıtım.
- Sinden, J. E., Hoy, W. K., & Sweetland, S. R. (2004). An analysis of enabling school structure: Theoretical, empirical, and research considerations. *Journal of Educational Administration*, 42(4), 462-478. https://doi.org/10.1108/09578230410544071
- Sine, W. D., Mitsuhashi, H., & Kirsch, D. A. (2006). Revisiting Burns and Stalker: Formal structure and new venture performance. *Academy of Management Journal*, 49(1), 121-132. <u>https://doi.org/10.5465/amj.2006.20785590</u>
- Spinella, F. A. (2003). *The principal's role in new teacher retention* (Unpublished doctoral dissertation). University of New Orleans, New Orleans, LA.
- Stinchcombe, A. L. (1965). Social structure and organizations. In J. G. March (Ed.), *Handbook of organizations* (pp. 142–193). Rand McNally.
- Sweetland, H. (2001). Authenticity and sense of power in enabling school structures: An empirical analysis. *Education*, 121(3), 581-588.
- Volk, A. (2011). Teachers' experiences with bureaucracy in loosely and tightly coupled systems: Impacts on professional practice. In 12th Annual University of Manitoba Education Graduate Student Symposium: Sharing Our Research (March 4–5). University of Manitoba, Winnipeg, Canada.
- Watts, D. (2009). *Enabling school structure, mindfulness, and teacher empowerment: Test of a memory* (Unpublished doctoral dissertation). The University of Alabama, United States.
- Weber, M. (1947). The theory of social and economic organization. Oxford University Press.
- Wilden, R., Gudergan, S. P., Nielsen, B. B., & Lings, I. (2013). Dynamic capabilities and performance: Strategy, structure, and environment. Long Range Planning, 46(1-2), 72–96. <u>https://doi.org/10.1016/j.lrp.2012.12.001</u>
- Yıldırım, K. (2014). Mekanik-organik örgütsel yapı değişkenleri perspektifiyle 6528 sayılı kanunun okulların örgütsel yapısında yaratabileceği değişimin incelenmesi. *Kuram ve Uygulamada Eğitim Yönetimi*, 20(3), 359-391.



Except where otherwise noted, this paper is licensed under a **Creative Commons Attribution 4.0 International license.**