

Research Article | Araştırma Makalesi

Turkish-Islamic type management scale through the Nizamülmülk ideas***Alper Tunga Şen**
Fatma Zehra SaviDr. Öğr. Üyesi, Kastamonu Üniversitesi, alpertungasen@kastamonu.edu.tr, [0000-0003-1943-9040](https://orcid.org/0000-0003-1943-9040)Prof. Dr., Karabük Üniversitesi, fatmazehra@karabuk.edu.tr, [0000-0003-1554-6500](https://orcid.org/0000-0003-1554-6500)

Corresponding author/Sorumlu yazar: Alper Tunga Şen

✉ alpertungasen@gmail.com**Abstract**

Management science has emerged as a field that has attracted much attention, and different management models are constantly being researched. As a result, scientists are frequently on the agenda and conducting in-depth studies to develop a better or more ideal management model. The primary purpose of this study is to create a valid and trustworthy seven-dimensional scale to introduce a new management model to the literature. The scale has a unique value in that it fully covers the seven sub-dimensions it takes and is performed for the first time. Consequently, a valid and reliable scale was developed based on Siyasetname, one of Nizamülmülk's works. After the analysis, it was confirmed that it was an appropriate descriptive scale consisting of 32 items and seven sub-dimensions. The goodness-of-fit values of the scale (CMIN/SD: 2.13, RMSEA: 0.065, CFI: 0.93, GFI: 0.82, NFI: 0.89, SRMR: 0.067) were within acceptable ranges. This scale creates an opportunity to compare the management models preferred today, which is important for determining suitable management models. The article ends with a discussion of the theoretical and practical results and suggestions for future research.

Keywords: Management, Management Model, Nizamülmülk, Siyasetname**JEL Codes:** H70, H830**Nizamülmülk fikirleri ışığında Türk-İslam tipi yönetim modeli ölçeği****Öz**

Yönetim bilimi, oldukça ilgi gören ve farklı yönetim modellerinin sürekli araştırıldığı bir alan olarak ortaya çıkmıştır. Sonuç olarak bilim insanları daha iyi veya daha ideal bir yönetim modeli geliştirmek için sıklıkla konuyu gündeme getirmekte ve birçok derinlemesine çalışma yürütmektedirler. Bu makalenin temel amacı, literatüre yeni bir yönetim modeli kazandırmak adına geçerli ve güvenilir yedi boyutlu bir ölçek oluşturmaktır. Ölçek, içerdiği yedi farklı alt boyutu tam olarak kapsamaya ve ilk kez uygulanması açısından benzersiz bir değere sahiptir. Yapılan çalışma neticesinde Nizamülmülk'ün eserlerinden biri olan Siyasetname'den yola çıkılarak geçerli ve güvenilir bir ölçek geliştirilmiştir. Yapılan analiz sonrasında 32 madde ve yedi alt boyuttan oluşan, uygun ve açıklayıcı bir ölçek olduğu doğrulanmıştır. Ölçeğin uyum iyiliği değerlerinin (CMIN/SD: 2,13, RMSEA: 0,065, CFI: 0,93, GFI: 0,82, NFI: 0,89, SRMR: 0,067) kabul edilebilir aralıklarda olduğu görülmektedir. Oluşturulan bu ölçek ile günümüzde tercih edilen yönetim modellerinin karşılaştırılmasına imkân vererek, kendilerine uygun yönetim modellerini belirleyebilmeleri konusunda önem teşkil etmektedir. Makale, teorik ve pratik sonuçların tartışılması ve gelecekteki araştırmalar için önerilerde bulunulmasıyla sona ermektedir.

Anahtar Kelimeler: Yönetim, Yönetim Modeli, Nizamülmülk, Siyasetname**JEL Kodları:** H70, H830**Introduction**

Management can be characterized as a behavior that exists in all local, social, and political situations, as well as in organizations (Boddy, 2017, p. 11). Conceptually, management and other scientific fields are closely related. While the idea of management relates to managers in an institutional sense, it refers to management practices in a functional sense (Koontz, 1961). 183). Currently, explaining management as a concept solely through people is unacceptable. Nowadays, material and moral elements, such as effective and efficient use of resources, motivating individuals, and evaluating their performance, should be included in the concept of management (Eren, 2001, p. 3). There needs to be a decision-maker and governed community for the management

* This research has been derived from the first author's Ph.D. Dissertation under the supervision of the second author at Karabük University. The dissertation title is "Nizamülmülk Fikirleri Işığında Türk-İslam Tipi Yönetim Modeli Ölçeği" / Bu çalışma Karabük Üniversitesi Lisansüstü Eğitim Enstitüsü İşletme Anabilim Dalı'nda birinci yazar tarafından ikinci yazarın danışmanlığında tamamlanmış olan "Nizamülmülk Fikirleri Işığında Türk-İslam Tipi Yönetim Modeli Ölçeği" başlıklı doktora tezinden türetilmiştir.

How to cite this article / Bu makaleye atıf vermek için:

Şen, A. T., & Savi, F. Z. (2024). Turkish-Islamic type management scale through the Nizamülmülk ideas. *KOCATEPEİİBFD*, 26(1), 59-72.

<https://doi.org/10.33707/akuiibfd.1355564>

process to emerge (Turan & Şahin, 2016, s. 18). A community's or a nation's political, social, and cultural values distinguish the management model. A management model that can be considered effective and efficient for one country may turn into a real management failure for another country (Taş, 2007, p. 2).

Beginning in the early 1950s, comparisons of management systems evolved, and scientists started to reveal the differences and similarities across management practices. The first discussions on the concept of management were based on the studies of Weber, Fayol, and Taylor. While Weber explains the indispensable element of the concept of management as the concept of bureaucracy, Taylor says that it is important to find the way things can be carried out most effectively and efficiently. Fayol, on the other hand, proposed a monotype organization and management model and argued that it could be applied to all organizations (Turan & Şahin, 2016, pp. 33-40). Another type of comparison is called overlapping (convergent) and differential views. The overlapping view did not allow the distinction between administrations; rather, it emphasized the existence of a universal model in administration (Warner, 2003, p. 5). The segregationist viewpoint contends that, in addition to economics and ideology, national cultures, environmental factors, and institutional practices are also important and effective in determining the success of the administration (Lincoln et al., 1978, pp. 829-847). For an effective and efficient management model to emerge, attention should be paid to various activities, thoughts of the community, and sub-processes such as planning, organization, management, coordination and control, efficient use of resources, authority, and harmony between the ruler and the ruled (Eren, 2001, p. 4; Acar & Bıyık, 2012, pp. 635-796). This study supports the segregationist perspective.

Theorists supporting the classical management approach advocate the aims of the organization, the work to be done to achieve goals, the division of labor, specialization, and strict hierarchical order (Carzo & Yanouzas, 1967, p. 28). Organizations are accepted as closed (not related to the external environment) systems (Baransel, 1979, p. 100; Bobbitt et al., 1974, p. 53; Miles, 1980, p. 189). Neoclassical management theories have brought the concept of social people to the literature by revealing that employees are primarily human beings (Koçel, 1998, p. 146). One of the most important scientists among neo-classical management theory thinkers is Elton Mayo, who carried out Hawthorne research (Mullins, 2013, pp. 50-55). Research has shown that human interactions and behaviors have a significant impact on organizational structure, effectiveness, and production (Yasin, 2013, p. 22). The X and Y theory, developed by another neoclassical theorist, McGregor, is one of the important studies that show how significant the importance given to human and human nature and the selves of people is for a business (Mullins, 2005, p. 100). The Neo-Classical Management approach is defined as a more individual-oriented approach compared to classical management theories, which do not see any factor other than the "mechanical" and "physiological" elements of management (Kitana, 2016, p. 16-21). Modern management theories are based on the System and Contingency approaches (Turan & Şahin, 2016, p. 46). It was proposed by Von Bertalanffy and is the "General Systems Theory". Related theory enabled the growth and development of management science in a multidisciplinary manner (Klır, 1969, p. 38). According to system theory, minor components are interdependent, and a change in one component can affect the entire structure. (Compton & Galaway, 1979, p. 73). Another approach is the contingency method. The contingency approach accepts the complexity in the management of modern organizations and proposes a separate "good management model" and "a good manager model" for each condition and situation (Luthans, 1973, pp. 67-72). This contingency approach expresses the purpose of developing the scale. In particular, there is no proof that a management model that is successful in one nation will work in another. Different cultures and events may reveal the necessity of different types of managers or management models. Approaches that contribute to the development of post-modernist management thought and enable the development of this thought are listed as Transaction Cost Theory (supporting the use of microeconomic models in organizations), Institutionalization Approach (a process where new norms, values, and structures are combined), and Population Ecology (organizational structures should be adapted to the environment). The Resource Dependency Approach (which advocates the view that organizations have to obtain their needs from their environment) and the Agent Approach (where problems can be resolved by considering the wishes and interests of both parties) (Robins, 1987: 68-86; Goodman & Bazerman, 1979, p. 48; Hannah and Freeman, 1984, pp. 149-164; Pfeffer and Salancik, 1978, pp. 141-164; Scott, 1992, p. 114). When all the aforementioned methods are considered, it becomes clear that no management model can be accepted as unconditional and universally correct for every organization.

Another point to note is the management process. It can be defined as estimating the organization's future with the management process to a certain extent, planning, organizing, and coordinating accordingly (Mulder, 2018, pp. 1-6).

After the literature review, it was determined that such a study on Siyasetname had not been conducted before. First, it aims to fill this gap in the literature. The most basic claim of this research is that countries' adoption of management structures related to their own culture will result in a more successful management structure. It is not appropriate to adopt the understanding that a management model that has been implemented and succeeded in one country will be successful in every country. When an evaluation is made specifically for Türkiye, it is seen that there are not many similar studies before. For this reason, considering the historical process, this study was carried out with the idea that it was necessary to create a Turkish-Islamic Type Management

Model in line with the ideas of Nizamülmülk, a successful manager. Adopting a management structure compatible with Turkish culture in the future will increase the success of management activities.

This study reveals a multidimensional Turkish-Islamic management model that can be applied to public institutions using a valid and accurate scale. Nizamülmülk's *Siyasetname*, which was employed in the study to define the management model and managerial qualities, considered the literature review and historical process. The management model was examined in seven dimensions. First, it explains why Nizamülmülk's work was selected and which couplets are preferred. The research design, data collection methods, and procedures for creating the measurement model are then discussed. Subsequently, the outcomes of several analyses, including validity, reliability, and factor analyses, were presented. The theoretical and practical results of this scale are discussed in the concluding section of the study.

In the following subheadings of the study, information about Nizamülmülk's management approach, the issues he paid attention to as a successful scientist, and his work *Siyasetname* are included in order to understand the management model created more clearly.

1. Nizamülmülk as a Management Scientist and Management Model

Primarily, one of the reasons why Nizamülmülk's work was chosen as a pioneering work is that this work has never been used before to create a management model. It is among the ones mentioned in the literature that many universities in the West, such as Salerno, Paris, and Oxford, which everyone talks about with envy even today, were influenced by the Nizamiye Madrasahs (Kazanç, 2019, p. 197). On the other hand, Nizamülmülk's *Siyasetname* is one of the best examples of texts regulating administrative, financial, military, social, and political structures (Babaoğlu & Yıldız, 2015, p. 97).

It can be said that Islamic civilization established significant dominance even on other continents, considering the period Nizamülmülk lived. Nizamülmülk's achievements in religion, literary sciences, awareness of culture, and appreciation of the arts during its state duty can be attributed to its high level of education as well as some of its distinguishing characteristics. (Tunç & Çarkıt, 2019, p. 46). The famous vizier brought many innovations to improve state administration and policies. These innovations can be listed as ensuring systematization in the state, establishing Nizamiye Madrasahs, facilitating the public's access to information, developing information actively and consciously, and bringing justice, order, and merit to the fore (Erayşar, 2019, p. 488-508; Tunç & Çarkıt, 2019, p. 40). In addition, the advice and approaches to finding solutions to problems provided by the works of *Siyasetname* to the rulers of the state are noteworthy (Şimşek, 2019, p. 85). Another reason for including this work in the study is that it is the most admired among the written works, and the work explains Turkish customs and traditions well (Ahmadi, 2019, p. 31). In his work, *Siyasetname* Nizamülmülk expressed his opinions on a variety of issues, including madrasahs, the organization of the state's military, and the relationship between morality and administration. He includes instances from numerous pre- and post-Islamic regimes (Turan, 2019, p. 19). Nizamülmülk is among the rare personalities that should be seen as both a management scientist and a politician (Canatan, 2009, p. 194).

This work, which was written at Melikşah's request, was accepted as a guide by politicians living both in the period and in the following periods. To provide political information and be successful, many individuals in managerial positions at the state level have kept this work with them. (Koç, 2015, p. 501).

Before moving on to the second part of the study, it is necessary to mention why Nizamulmulk's famous work, *Siyasetname*, was chosen. First, it was mentioned before the study that Nizamülmülk was a successful scientist and had served as a vizier for many years. On the other hand, his famous work *Siyasetname* is considered a successful work that has been translated into many languages and gives advice to managers on how to be successful managers. The *Siyasetname* was preferred because it was a work whose validity was accepted at the international level and was written by Nizamülmülk, who had been a successful administrator for many years. Another factor that is effective in choosing work is that it offers advice to managers about management activities in general, not specific to certain issues. These issues include the attitudes and behaviors of managers, effective and efficient management activities, economic activities, social activities, judicial activities, and military activities. This comprehensive work aims to present a management model compatible with Turkish social structure and culture.

In line with these explanations, in the next subsection of the study, the factors that should be taken into consideration when creating the management model to correctly match the expressions in the *Siyasetname* with the sub-dimensions are explained.

2. Dimensions and Factors to Consider for Creating a Management Model

Scholars generally agree that management models are multi-dimensional. They also adopted the idea that management should have multiple functions. For example, Gulick and Urwick, in their study titled "Notes on Theory of Organizations", defined the functions of management and listed them as planning, organizing, staffing, directing, coordinating, reporting, and budgeting. As

shown in Table 1, Taş (2007) selected the factors to be taken into account to determine the sub-dimensions of the Islamic management model.

Table 1: Factors to Consider While Creating a Management Model

Key Aspects to Consider	Side Aspect
Cultural Structure of the Organization	It is essential first to comprehend human beings to develop the management model for the firm. To comprehend people, culture and social understanding should be understood. The elements that should be considered in the cultural structure can be listed as the values unique to women and men in society, understanding that the community is individualistic and collectivist, how to eliminate ambiguities, and the definition of the hierarchical structure. It should not be forgotten that the relationship between the management model and culture is of great importance in this study.
Financial Structure of the Organization	Financial independence can be viewed as the strongest assurance of an institution or organization's continuity. However, before the management model is determined, factors such as the level of economic development of the financial structure, the level of economic development of the institution or organization, the structural aspect of industrialization, the level of income per capita, the justice of income, and the level of development of the international structure are of great significance.
Social Structure of the Organization	Social structure is crucial for the development of the management model and for comprehending the living standards and values of individuals. In the social structure, there are individuals' religious views, living standards, values, historical background, and the distribution of differences in society.
Institutional Structure of the Organization	The final essential factor is the understanding of institutionalization that is used and adopted. However, the factors that are important for understanding institutionalization can be counted as the policies adopted, the behaviors adopted towards the employees, the place acquired in the financial systems, and the level of the education system.

Source: Taş, Ali (2007). Türk Yönetim Tarzı (Örgütlenme, Sahiplik, İnsan Kaynakları ve Stratejik Yönetim Boyutlarıyla), Doktora Tezi, Sakarya Üniversitesi, Sosyal Bilimler Enstitüsü, Sakarya, p. 40.

It is also accepted in other studies that the aforementioned components are the points to be considered while creating a management model. These factors, which are crucial in deciding what type of management model should be used, will also increase the acceptability of the management model to be created. In this study, while attempting to develop a Turkish-Islamic management model based on Nizamülmülk's book "Siyasetname", care was taken to consider all the above-mentioned dimensions. Cultural structure, perspective on leadership, positive or negative structural qualities of the manager, evaluation of employees, supervision of employees, intra-organizational justice (income justice, equality, and legal justice), and hierarchical structuring are among the dimensions that have been carefully examined.

3. Methodology

Before they reach the finished scale, scale development techniques go through a few steps. These include developing observable items to represent the idea, assessing the face and content validity of the initial items, conducting pre-testing, enhancing the scale, choosing the measurement model, assembling data, and assessing the construct validity and reliability of the scale (DeVellis, 2016, pp. 14-15). The relevant stages are also stated in the studies of different scientists (Tavşancıl, 2014, pp. 100; Çam and Baysan, 2010, pp. 59-71). Using this methodical procedure, a multidimensional management model scale was created.

Four sources were used to create the new scale: (1) Management science literature; (2) Nizamülmülk's work named Siyasetname; (3) Reviews of scale development experts; and (4) Pre-tests of the scale. There hasn't been a scale created to comprehend the Turkish-Islamic management model when the general management literature has been examined. Therefore, this scale development study was conducted to determine whether a management model specific to Turkish culture was adopted.

Due to the limited number of studies on the measurement of the Turkish-Islamic management model and the work of Nizamülmülk, both the theory and empirical research from the management literature benefited from the couplets in the political work to create the scale items.

It is not appropriate to use of ready-made scales to quantify a particular phenomenon. These ready-made scales may not be suitable or useful. Therefore, developing their own scale tools seems to be the best option for researchers (DeVellis, 2016, p. 2). The primary goal of scale development is to provide a measurement tool that is valid and reliable at the specified level (Churchill, 1979, p. 65; DeVellis, 2016, pp. 14-15).

The scale development guidelines provided by Churchill (1979), DeVellis (2016), and Wang et al. (2007) were adopted in the study. The management model-scale development process is explained in four stages. The first part is the creation of scale items. The second part is the initial data collection and scale purification. The third part is the second data collection and re-analysis of the scale. The last part is the determination of the scale of the Turkish-Islamic management model.

Qualitative and quantitative methodologies were applied to create a more thorough scale for this study. An initial item pool was constructed, and the items' content validity was assessed. Exploratory factor analysis and reliability testing were performed to enhance the measurement scale. Third, Confirmatory Factor Analysis (CFA) was performed to finalize the Turkish Islamic management model scale. Owing to the implementation of the scale in Türkiye, the scale items were prepared in Turkish, the scale's original language.

3.1. Item Creation

First, as many items as possible were created in a way that matched the desired structure from the couplets studied in depth in Nizamülmülk's Siyasetname to establish the item pool. The translation of "Siyasetname" by Mehmet Taha AYAR was used to extract the items. An initial pool of 109 items was prepared for review by the scale development and survey design experts. The questions were read by a group of eight academics who received positive feedback from experts. Closed-ended questions were then used, asking the extent to which the participants agreed (on the phrases. Their responses ranged from 1 ("strongly disagree" to 5 "strongly agree").

The scale form prepared at this stage was carried out on behalf of a pilot application with 40 senior managers and employees who continued their working lives at Kastamonu University. Participants were requested to provide feedback after completing the survey, such as by flagging any questionable items. Participants and experts did not have negative criticism of the item pool. Thus, the 109 items in the item pool remained the same. The items were then analyzed for extraction. After analysis of the obtained data, the Cronbach's Alpha value of the scale was determined to be 0.918. This indicates that the scale has a high level of reliability. It is recommended that Cronbach's α be above 0.70 (Seçer, 2015, p. 60).

Table 2: Results of Total Item Analysis After Item Subtraction

	Adjusted Item- Total Correlation	Cronbach's Alpha Value When the Item is Deleted
A good manager is always aware of their employees.	.411	.917
Strong communication between managers and employees increases the power of management.	.305	.918
As a manager, I waive my rights and try to defend the rights of my employees when appropriate.	.406	.917
The manager should approach the workforce with a reasonable attitude.	.348	.917
Easy access to the manager increases the effectiveness of the control.	.605	.915
The manager should supervise their assistants as well as the employees.	.420	.917
Managers should be audited at regular intervals, like other employees.	.649	.914
The manager should communicate with the employees in written ways when appropriate.	.506	.916
Managers must be aware of every job that they are responsible for.	.385	.917
The closeness of the manager to their employees helps in making the right decision and solving problems.	.516	.915
The manager must resolve employees' issues and problems.	.452	.916
The superior should benefit from the knowledge of the subordinate.	.407	.917
The manager should handle work-related problems immediately, including out-of-working hours.	.402	.917
The manager should have pre-planned plans for even the worst problems.	.637	.915
The manager should not assign a job to two people at the same time.	.534	.915
Superiors should be accessible to subordinates easily.	.597	.915
Citizens of the Turkic Republics should be given a certain amount of work in the institution per the principle of pact fidelity.	.515	.916
In cases of sufficient resources, employees who are not of Turkish heritage should not work for the institution.	.399	.917
Moral principles should also be taken into consideration when promoting employees.	.516	.915
Employees should be given fair wages.	.488	.916
Employee loyalty is increased by regular salary increases.	.702	.914
A fair wage enables the manager and the employee to do their jobs better.	.546	.915
The manager should provide management according to the principles of openness and transparency.	.482	.916
The manager must be ready in advance for even the worst problems.	.312	.918
Easy access to the manager increases employee performance.	.521	.916
As well as the manager, their assistants should also be knowledgeable and competent.	.483	.916
When I show that I do my job with love as a manager, my employees also do their jobs with love.	.463	.916
The injustice committed by the manager will not go unpunished.	.420	.917
The manager or superior should also admit their own mistakes.	.451	.916
Both the manager and the employee should be equal before the justice.	.536	.916
The award must be presented right away after success.	.353	.918
Expelling the defeatists.	.562	.915
Being constant in their opinions.	.432	.918
Being harsh on the oppressors.	.311	.918
Ensuring Security	.485	.916
Giving priority to talented people.	.320	.918
Being generous.	.362	.917
Being wise.	.352	.917
Being respectful to knowledgeable individuals.	.362	.917
The manager must take responsibility.	.346	.917
The manager must be directive.	.485	.916

For the study to achieve healthier results, it can be seen that Cronbach's Alpha value rose from 0.884 to 0.918 after the question extraction operations. Given that it is less than 0.30 on the "Adjusted Item-Total Correlation" tab, the scale item in question has a low correlation with the entire study. The fact that the remaining 42 items were not less than 0.30 is proof of the compatibility of the items with the scale structure.

3.2. Primary Data Collection and Scale Simplification

After the pilot study and item removal, 42 items were added to the official scale from the original 109 items that were prepared to create the questionnaire. A five-point Likert-type scale ranging from 5 (strongly agree) to 1 (strongly disagree) was used with the participants. A total of 150 questionnaires were distributed, but incomplete questionnaires were excluded from the study. Participant profiles are shown in Table 3.

Table 3: Frequency Table of Participants in the Primary Data Collection Application

Variable	%		%	
Gender	Male (% 66.9)		Female (%33.1)	
Marital status	Married (%82.3)		Single (% 17.7)	
Child	Yes (%72.3)		No (%27.7)	
Educational Status	Licence (%6.2)	Degree (%43.1)	Doctorate (%50.8)	
Foreign language	Yes (% 96.9)		No (% 3.1)	
Monthly Income	5000-6999 TL (% 26.9)	7000-9999 TL (%35.4)	10000 TL and Above (% 37.7)	
Age	25-34 (%23.1)	35-44 (%43.8)	45-54 (%26.2)	55 and Above (% 6.9)
Work Time	1-5 Years (%12.3)	6-10 Years (%19.2)	11-16 Years (%24.6)	16 Years and Above (%43.8)

33.1% of the 130 participants were female and 66.9% were male. Most of the participants were aged between 35 and 44 (4308%) and had higher levels of education, with more than 50% having a doctoral-level education. The majority of the respondents (37.7%) have a monthly income of more than 10,000 Turkish Liras.

3.3. Item Reduction and Explanatory Factor Analysis

Following the pilot study, explanatory factor analysis was carried out to evaluate the scale's construct validity and determine the distribution of factors. The data were subjected to an explanatory factor analysis utilizing the varimax rotation approach to reduce the number of components. Table 4 displays the findings of the factor analysis together with related statistics. According to the literature review, the "Corrected Item Total Correlation" value can be at least 0.30 for each item. It is generally agreed upon that, after item analysis, items scoring below this number ought to be dropped from the study. (Cristobal et al., 2007, p. 317-340). It was agreed that the overlapped items belonged to the factor that the item had a higher burden on. Following the analyses and simplifications, 32 items were left on the scale after the removal of 10, and a clear seven-factor structure became apparent. The whole variation in the factor model was explained by the sum of the factor loads, or 57.27%. The Kaiser-Meyer-Olkin measurement was used to ensure that the data had sufficient natural correlations to perform explanatory factor analysis. The Kaiser-Meyer-Olkin test outcome of .850 demonstrated the application of explanatory factor analysis. Factors include the manager's positive behaviors, manager-personnel relationship, supervision and control area, wage policy, problem-solving ability, manager's negative behaviors, and nationality. As can be seen in Table 4, Cronbach's α values greater than .50 (Kılıç, 2016, pp. 47-48) indicate that all factors are reasonably reliable, which complies with the internal consistency criteria (Hair et al., 2006, p. 100). The total scale's Cronbach's α value was determined to be 0.886. This value proves that the scale is highly reliable. These results showed that this scale is multidimensional.

Table 4: Factor Loads

Factors/Items	Factor Loads	Eigen Value	Cronbach's α
Factor 1. Manager's Positive Behaviors		11,489	0,799
The manager should give priority to talented people.	,734		
The manager must be directive.	,688		
The manager needs to be generous.	,655		
The manager should be respectful to knowledgeable individuals.	,638		
The manager must take responsibility.	,593		
Factor 2. Manager and Personnel Relationship		2,304	0,815
Easy access to the manager increases the effectiveness of the control.	,749		
Superiors should be accessible to subordinates easily.	,678		
Easy access to the manager increases employee performance.	,666		
The closeness of the manager to their employees helps in making the right decision and solving problems.	,598		
When jobs are distributed fairly among employees, performance improves.	,529		
The manager must resolve employees' issues and problems.	,478		

Table 4: Continue.

Factor 3. Supervision and Control Area		2,057	0,717
The manager must provide security.	,666		
Managers must be aware of every job that they are responsible for.	,639		
As well as the manager, their assistants should also be knowledgeable and competent.	,552		
The manager should supervise their assistants as well as the employees.	,548		
The award must be presented right away after success.	,512		
The manager should approach the workforce with a reasonable attitude.	,457		
Factor 4. Wage Policy		1,911	0,846
Employees should be given fair wages.	,825		
A fair wage enables the manager and the employee to do their jobs better.	,671		
The manager should provide management according to the principles of openness and transparency.	,603		
Employee loyalty is increased by regular salary increases.	,601		
Factor 5. Problem-solving		1,652	0,676
The manager should have pre-planned plans for even the worst problems.	,754		
A good manager is always aware of their employees.	,595		
The manager should handle work-related problems immediately, including out-of-working hours.	,589		
Factor 6. Manager's Negative Behaviors		1,571	0,570
The manager should expel the defeatists.	,793		
The manager must be harsh on the oppressors.	,763		
The manager should be constant in their opinions.	,503		
Factor 7. Nationalism		1,467	0,524
In cases of sufficient resources, employees who are not of Turkish heritage should not work for the institution.	,822		
Citizens of the Turkic Republics should be given a certain amount of work in the institution, per the principle of pact fidelity.	,585		
Moral principles should also be taken into consideration when promoting employees.	,571		

3.4. Secondary Data Collection and Re-analysis of the Scale

Following the aforementioned steps and analysis, a 32-item purified scale was produced. However, Churchill (1979) and DeVellis (2016) recommended reevaluating the scale's validity and reliability using a different sample. It should be noted that the scale was reanalyzed over new data.

The degree to which a set of measured items accurately captures the theoretical latent concept that the items are intended to measure is known as construct validity (Messick, 1995, p. 741). Construct validity investigates whether field data backs up the theoretical model (Bollen, 1989, p. 100). As recommended by earlier literature on scale construction and survey research techniques, confirmatory factor analysis (CFA) enables us to test the model's convergent and discriminant validity (Thomson et al., 2007, p. 28; Usher & Pajares, 2009, p. 98; Yi & Gong, 2013, p. 1280). CFA also makes statistical sense about whether the factors are adequate for explaining the theoretical structure. It can be said that CFA is an effort to test a theory (Huck, 2012, pp. 495-496). With CFA, it is checked whether the items on the scale measure anything or not (Schreiber et al., 2006, pp. 323-337). After obtaining the desired data for confirmatory factor analysis, some values are listed as a result of the CFA analysis. These values are called "Goodness-of-Fit Indices" (Karagöz & Ağbektaş, 2016, pp. 274-290). While some researchers think that only chi-square, CFI, and SRMR values should be reported, some scientists divide these indices into three groups: absolute fit indices (χ^2 , SRMR, and RMR), tight fit indices (RMSEA), and comparative fit indices (CFI, NNFI), and argue that at least one value from each group should be reported (Koyuncu and Kılıç, 2019, pp. 361-388; Özdemir and Tan, 2023, p. 87).

Table 5: Goodness-of-Fit Indices Acceptable Ranges

Variable	Perfect Fit	Acceptable Fit
χ^2 Fit testing	0,05 < p ≤ 1	0,01 < p ≤ 0,05
CMIN/SD	$\chi^2 / sd \leq 3$	$\chi^2 / sd \leq 5$
IFI	0,95 ≤ IFI	0,90 ≤ IFI
CFI	0,97 ≤ CFI	0,95 ≤ CFI
RMSEA	RMSEA ≤ 0,05	RMSEA ≤ 0,08
GFI	0,90 ≤ GFI	0,85 ≤ GFI
RMR	0 < RMR ≤ 0,05	0 < RMR ≤ 0,08

Source: Karagöz, Yalçın ve Ağbektaş, Ali (2016). Yapısal Eşitlik Modellemesi İle Yaşam Memnuniyeti Ölçeğinin Geliştirilmesi; Sivas İli Örneği. *Bartın Üniversitesi İ.İ.B.F. Dergisi*, 7(13), 274-290.

However, there are opinions in the literature that the value of the NFI index mentioned is 0.90, but it can be accepted up to 0.80, and that this value can be reported well. The CFI value can also be accepted when it is greater than 0.90 (Hooper, Coughlan, Mullen, 2008, pp. 53-60). It is acceptable for the AGFI value to be greater than 0.85 (Kilis and Yıldırım, 2018, p. 665-679). As can be understood from the explanations, it is crucial to capture the values of the fit indices and report the values as much as possible.

Employees at Kastamonu University participated in the confirmatory factor analysis. A total of 265 questionnaires were returned. As seen in Table 6, 74% of the participants are men and 26% are women. Almost all of the participants (93.2%) have a high education level. The majority of the participants (47.9) are in the 35-44 age range.

Table 6: Goodness-of-Fit Indices Acceptable Ranges

Variable	%		%	
Gender	Male (% 74)		Female (%26)	
Marital status	Married (%84.9)		Single (% 15.1)	
Child	Yes (%84.9)		No (%15.1)	
Educational Status	Licence (%6.8)	Degree (%49.1)	Doctorate (%44.2)	
Foreign Language	Yes (% 98.5)		No (% 1.5)	
Monthly Income	5000-6999 TL (% 24.9)	7000-9999 TL (%36.2)	10000 TL and Above (% 38.9)	
Age	25-34 (%17.7)	35-44 (%47.9)	45-54 (%27.9)	55 and Above (% 6.4)
Work Time	1-5 Years (%9.1)	6-10 Years (%17.7)	11-16 Years (%25.7)	16 Years and Above (%47.5)

After the explanatory factor analysis, the number of items in the scale was reduced to 32, and the number of factors was determined as 7. To verify or provide these results, the study was subjected to confirmatory factor analysis using the LISREL 8.80 package program.

Table 7: Confirmatory Factor Analysis Results

Factors/Items	Factor Loads	T Value	Cr
Factor 1. Manager's Positive Behaviors			0.81
The manager should give priority to talented people.	.734	10,50	
The manager must be directive.	.688	9,40	
Table 7. Continuation			
The manager needs to be generous.	.655	10,22	
The manager should be respectful to knowledgeable individuals.	.638	9,70	
The manager needs to be wise.	.623	10,11	
The manager must take responsibility.	.593	9,70	
Factor 2. Manager and Personnel Relationship			0.78
Easy access to the manager increases the effectiveness of the control.	.749	10,15	
Superiors should be accessible to subordinates easily.	.678	9,85	
Easy access to the manager increases employee performance.	.666	9,91	
The closeness of the manager to their employees helps in making the right decision and solving problems.	.598	10,72	
When jobs are distributed fairly among employees, performance improves.	.529	9,41	
The manager must resolve employees' issues and problems.	.478	10,01	
Factor 3. Supervision and Control Area			0.73
The manager must provide security.	.666	10,36	
Managers must be aware of every job that they are responsible for.	.639	10,39	
As well as the manager, their assistants should also be knowledgeable and competent.	.552	9,41	
The manager should supervise their assistants as well as the employees.	.548	9,95	
The award must be presented right away after success.	.512	10,20	
The manager should approach the workforce with a reasonable attitude.	.457	10,99	
Factor 4. Wage Policy			0.77
Employees should be given fair wages.	.825	10,71	
A fair wage enables the manager and the employee to do their job better.	.671	9,52	
The manager should provide management according to the principles of openness and transparency.	.603	9,67	
Employee loyalty is increased by regular salary increases.	.601	6,90	
Factor 5. Problem- solving			0.73
The manager should have pre-planned plans for even the worst problems.	.754	4,42	
The manager must be ready in advance for even the worst problems.	.604	9,91	
A good manager is always aware of their employees.	.595	10,31	
The manager should handle work-related problems immediately, including out-of-working hours.	.589	10,62	
Factor 6. Manager's Negative Behaviors			0.73
The manager should expel the defeatists.	.793	4,80	
The manager should be constant in their opinions.	.503	11,22	
Factor 7. Nationalism			0.70
In cases of sufficient resources, employees who are not of Turkish heritage should not work for the institution.	.822	10,20	
Citizens of the Turkic Republics should be given a certain amount of work in the institution per the principle of pact fidelity.	.585	9,21	
Moral principles should also be taken into consideration when promoting employees.	.571	5,61	

DFA was used for parameter estimation to confirm the scale's dependability and construct validity. (Jöreskog & Sörbom, 1993, p. 100). The results are summarized in Table 7. The main purpose of looking at the T value first is to ensure that the relevant item is removed from the scale and that the study is redone if there is a statistical error in this value. It is important to find meaningful T

values in confirmatory factor analysis. If the t value of the mentioned table exceeds 1.96, it can be interpreted that it is significant at the 0.05 level. And if it exceeds 2.56, it can be interpreted as being significant at the 0.01 level (Çapık, 2014, pp. 196-205). The results show that the model obtained in the first stage does not report errors within the t values and is significant

Table 8: Confirmatory Factor Analysis Goodness-of-Fit Indices

Goodness of Fit Indices	Perfect Fit	Acceptable Fit	Results Obtained in the Study	Fit Degree
χ^2 (Ki-Kare) Fit test	$0,05 < p \leq 1$	$0,01 < p \leq 0,05$	0.00000	Significant
CMIN/SD	$\chi^2 /sd \leq 3$	$\chi^2 /sd \leq 5$	2,1322	Perfect Fit
IFI	$0,95 \leq IFI$	$0,90 \leq IFI$	0,93	Acceptable Fit
CFI	$0,97 \leq CFI$	$0,90 \leq CFI$	0,93	Acceptable Fit
RMSEA	$RMSEA \leq 0,05$	$RMSEA \leq 0,08$	0,065	Acceptable Fit
RMR	$0 < RMR \leq 0,05$	$0 < RMR \leq 0,08$	0,047	Perfect Fit
NFI	$0,95 \leq NFI$	$0,80 \leq NFI$	0,89	Acceptable Fit
GFI	$0,90 \leq GFI$	$0,85 \leq GFI$	0,82	Low Fit
SRMR	$0 < SRMR \leq 0,05$	$0 < SRMR \leq 0,08$	0,067	Acceptable Fit

Table 8 presents the overall fit indices acceptable for the final model. Although the χ^2 value was significant (2.1322, $p < .001$), other goodness-of-fit measurements indicated that the seven-factor model had a good overall fit with the data (GFI = .82, RMSEA = .065, NFI = .89, CFI = .93). These results mean that the modified final model is an acceptable fit.

GFI and AGFI values can take a value between 0 and 1 in case of fit of the model; they should be closer to 1 and cannot be negative (Jöreskog & Sörbom, 1993, p. 102; Raykov & Marcoulides, 2006, p. 100). According to Raykov and Marcoulides (2006), just like the AGFI and GFI values, the NFI value, which should be closer to 1 between 0 and 1 (Kline, 2005, p. 106), is 0.89; it was determined that the CFI value, which should be close to 1 between 0 and 1 (Raykov & Marcoulides, 2006, p. 100; Brown, 2006, p. 98; Byrne, 2010, p. 102), was 0.93. With the obtained indicators, it is possible to say that the model is acceptable. Additionally, it is revealed that there are values in the published values that are equivalent to those in the Han and Perry (2020) study.

The scale's convergent and discriminant validity will then be assessed. Checking to see if all factor loads are significant is one way to gauge convergent validity (Bagozzi & Yi, 1988, p. 90). As shown in Table 7, large t values and all factor loadings were found to be significantly different from zero. Finally, the composite reliability (CR) values were found to vary between .70 and .81. It is also seen that the study also met the requirement that the CR value be greater than 0.6 (Hair, Black, Babin, Anderson, Tatham, 2006, p. 102).

Table 9: Correlation Values Between Factors

Correlation Values Between Sub-Dimensions							
	Manager's Positive Behaviors	Manager and Personnel Relationship	Supervision and Control Area	Wage Policy	Problem-solving	Manager's Negative Behaviors	Nationalism
Manager's Positive Behaviors	Cor. 1						
Manager and Personnel Relationship	Cor. .470**	1					
Supervision and Control Area	Cor. .482**	.560**	1				
Wage Policy	Cor. .571**	.607**	.469**	1			
Problem-solving	Cor. .353**	.421**	.452**	.398**	1		
Manager's Negative Behaviors	Cor. .264**	.151*	.332**	.169**	.253**	1	
Nationalism	Cor. .235**	.206**	.168**	.205**	.164**	.182**	1

**at 0.01 significance level
* at 0.05 significance level

Finally, Table 9's correlation values show the direction and strength of the association between the scale variables. Köklü vd. as mentioned in (2013), correlation values are expected to take values between -1 and +1. This value is denoted by r. It shows that there is no relationship between $r=0$, a low level of correlation between $0.01 < r < 0.29$ values, a moderate correlation between $0.30 < r < 0.70$ values, a high level of correlation between $0.71 < r < 0.99$ values, and a perfect relationship in the case of $r=1$. When the table is reviewed, it becomes clear that there are moderate and positive relationships between the sub-dimensions. The analyses conducted have shown that the "Turkish-Islamic Type Management Model Scale," which can be regarded as statistically significant and acceptable, can be used to transform the couplets in Nizamülmülk's work titled "Siyasetname."

Conclusion

This study proposes to measure the characteristics of the Turkish-Islamic management model. The developed scale was built using Nizamülmülk's "Siyasetname" couplets, which are regarded as relevant by most management scientists worldwide. After a meticulous scale development process, the Turkish-Islamic Type Management model was developed with seven dimensions, and scale reliability was determined to be 0.887. This value showed acceptable scale reliability.

Our findings support previous management model research in certain respects. In the previous management model determination studies, it was emphasized that certain sub-dimensions should be paid attention to in organizations. In the study conducted by Ouchi (1981), it was revealed that sub-dimensions such as control area, control mechanism, and responsibility sharing should be considered while determining the management model.

In the scale of the Turkish-Islamic Type Management model developed as a result of the study, similar sub-dimensions such as the area of control and supervision, wage policy, and manager-personnel relationship emerged. These management models, however, were developed by scientists according to their own cultures and characteristics.

Ouchi, the scientist who revealed it, is an American of Japanese descent. While the American-style management model is suitable for American culture, the Japanese-style management model is more successful in organizations that adopt Japanese culture and have the relevant culture (Ouchi, 1981, pp. 82-83). As mentioned before, the importance of culture can be understood more clearly when determining management models. This study is a response to the results of many studies in the literature. In a study conducted by Aydar (2009), he identifies the Turkish Type Management Model as a more traditionalist, determined, quick decision-making model that adapts quickly to change. However, in this study, the Turkish-Islamic Management Model indicates that it should adopt a structure that adapts to innovations and does not make rapid decisions. In addition, it is emphasized that the management should be ready for all kinds of problems in advance, should be easily accessible (which also emphasizes that it should not be too centralized), should be knowledgeable and competent, and should adopt a structure that shares responsibility with this model. Similar results were obtained with the study conducted by Sezginer (2014), which is a different study.

After talking about how management science is conceptualized, we developed a pool of 109 items using information from the literature, focus group discussions, and interviews. We converted the pool into 32 items reflecting seven sub-dimensions and higher-order factor models after obtaining various expert assessments and pretesting. 265 survey respondents, who were a sample of Turkish civil officials, were used to evaluate the reflective measurement model. A final measuring model with seven sub-dimensions and 32 items was created using model theory and CFA statistics.

In light of this scale, it was thought that a new management model specific to a different culture could be developed. However, the study has some limitations. This study was primarily carried out in Türkiye. For this reason, the obtained scale can be translated into different languages and applied in countries that adopt different management models. In addition, the questionnaire was prepared in Turkish. The main reason for this is to prevent the participants from being inadequate in their language skills during the survey. In future studies, the scale can be translated into different languages and applied to participants in different countries. In this way, it can be compared with other measurable management models (Type Z, Type A, and Type J). If all these limitations are removed in future studies, a larger-scale Turkish-Islamic management model may be possible in the literature.

It should not be forgotten that the work used while creating the scale in the study was written between 1086 and 1092, and the conditions of the period and today's conditions differ. Due to this, the management model may not be able to reach the same level of success as in the past. It is intended to identify the reasons for this failure with future studies and expose a more efficient, effective management model in the case where the management model has not achieved the successes in the past.

The Turkish-Islamic Type Management model scale revealed as a result of the study gives an idea about what a successful management model that reflects Turkish culture should be. It should not be forgotten that a successful management model should be similar to the cultures of the countries where it is implemented. However, this model will allow comparison not only by researchers of countries with similar cultures to Turkish culture, but also by researchers of countries with different cultures.



This research article has been licensed with Creative Commons Attribution - Non-Commercial 4.0 International License. Bu araştırma makalesi, Creative Commons Atıf - Gayri Ticari 4.0 Uluslararası Lisansı ile lisanslanmıştır.

Author Contributions

The authors have equally contributed to the article.

Acknowledgments

There is no acknowledgment reported by the authors.

Funding and Support

There is no funding and support reported by the authors.

Conflict of Interests

There is no conflict of interest reported by the authors.

Ethics Statement

The authors have reported that they obtained Ethical Committee Approval from Karabük University on 28/07/2020 with the number of 2020/10-7.

Corresponding Editors

Prof. Dr. Hüseyin Özgür, Anadolu University

Assist. Prof. Dr. İbrahim Yılmaz, Samsun University

Res. Assist. Atahan Demirkol, Afyon Kocatepe University

Kaynakça/References

- Acar, E., & Bıyık, S. (2012). Yönetim bilimi. Y. Tekin (Ed.), *Kamu Yönetimi* (ss. 635-796). Ankara: Orion Kitabevi.
- Ahmadi, B. T. S. (2019). Büyük vezir hacc Nizâmülmülk'ün hayatı, faaliyetleri ve eserlerine kısa bir bakış. M. K. Arıcan, M. E. Kala ve M. Tuğrul (Ed.), *Bilge Vezir Nizamülmülk* (ss. 22-34). Konya: Konya Büyükşehir Belediyesi Kültür Yayınları.
- Andersen, B. (2004). *Bringing business ethics to life: Achieving corporate social responsibility*, New York: ASQ Quality Press.
- Aytar, O. (2009) *Türk işletme kültürünün gelişim süreci: Türk tipi yönetim ve Türkiye'ye özgü kurumsallaşma anlayışının tarihsel bir analizi*. (Yayımlanmamış Yüksek Lisans Tezi) Selçuk Üniversitesi Sosyal Bilimler Enstitüsü, Konya.
- Babaoğlu, C., & Yıldız, M. (2015). Kamu politikası bakış açısından Selçuklu ve Osmanlı Devletlerinde hükümdar-danışman ilişkisi üzerine. *Yasama Dergisi*, (29), 84-108.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science* 16(1), 74-94. <https://doi.org/10.1007/BF02723327>
- Baransel, A. (1979). *Çağdaş yönetim düşüncesinin evrimi: Klasik ve neo-klasik yönetim ve örgüt teorileri*. İstanbul: İstanbul Üniversitesi.
- Blau, P. M., & Schoenherr, R. E. (1971). *The structure of organizations*. New York: Basic Books.
- Bobbitt R., Jr., R. Breinholt, R. D., & McNaull, J. (1974). *Organizational behavior: Understanding and prediction*. New Jersey: Prentice-Hall.
- Boddy, D. (2017). *Management: An introduction* (7th edition). Harlow: Pearson Education.
- Bollen, K. A. (1989). *Structural equations with latent variables*. New York : John Wiley & Sons
- Brown, C. (2006). *Social psychology*. London: Sage Publications Ltd.
- Byrne, B. M. (2010). *Structural equation modeling with AMOS*. (2nd edition). New York: Routledge
- Çam, M. O., & Baysan-Arabacı, L. (2010) Tutum ölçeği hazırlamada nitel ve nicel adımlar. *Hemşirelikte Araştırma Geliştirme Dergisi*, 2, 59-71.
- Canatan, K. (2009). Geleneksel siyaset ve devlet felsefesinin bir yorumu olarak "Siyasetname" Büyük devlet adamı Nizamülmülk'ün devlet ve siyaset anlayışı üzerine. *Turkish Studies*, 7, 194-220. <http://dx.doi.org/10.7827/TurkishStudies.905>
- Carzo, R., & Yanouzas, J. N. (1967). *Formal organization: A Systems approach*. Illionis: The Dorsey Press.
- Churchill, G. A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16(1), 64-73. <https://doi.org/10.1177/002224377901600110>
- Compton, B. R., & Galaway, B. (1979). *Social work processes*. Ontario: The Dorsey Press.
- Cristobal, E., Flavian, C., & Guinaliu, M. (2007). Perceived E-service quality (PeSQ): Measurement validation and effects on consumer satisfaction and website loyalty. *Managing Service Quality: An International Journal*, 17(3), 317-340. <https://doi.org/10.1108/09604520710744326>
- Çapık, C. (2014). Geçerlik ve güvenirlik çalışmalarında doğrulayıcı faktör analizinin kullanımı. *Anadolu Hemşirelik ve Sağlık Bilimleri Dergisi*, 17(3), 196-205.
- DeVellis, R. F. (2016). *Scale development: Theory and applications*. New York: Sage Publications.
- El Akremi, A., Gond, J. P., Swaen, V., De Roeck, K. & Igalens, J. (2018). How do employees perceive corporate responsibility? Development and validation of a multidimensional corporate stakeholder responsibility scale. *Journal of Management* 44(2), 619-657. <https://doi.org/10.1177/0149206315569311>
- Emshoff, J. R. (1994). How to increase employee loyalty while you downsize. *Business Horizons*, 37(2), 49-58. [https://doi.org/10.1016/0007-6813\(94\)90032-9](https://doi.org/10.1016/0007-6813(94)90032-9)
- Eraşar, O. (2019). Nizamiye Medreseleri ve Selçuklu Dönemi medrese mimarisinin ortaya çıkışı. M. K. Arıcan, M. E. Kala ve Mehmet Tuğrul (Editörler), *Bilge Vezir Nizamülmülk* (ss. 488-531). Konya: Konya Büyükşehir Belediyesi Kültür Yayınları.
- Eren, E. (2001). *Yönetim ve organizasyon*. İstanbul: Beta Yayıncılık.
- Goodman, P. S., & Bazerman, M. (1979). Institutionalization of planned organizational change. (In) B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior*, Greenwich, Connecticut: JAI Press.
- Haas, D. E., & Drabek, T. E. (1972), *Complex organizations: A Sociological Perspective*, New York: Macmillan.
- Haas, E., Hall, R. & Johnson, N. (1963). The size of the supportive component in organizations: A multi-organizational analysis, *Social Forces*, 42(1), 9-17. <https://doi.org/10.2307/2574940>

- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis*, 6th edition, New Jersey: Prentice Hall.
- Hair, J. F. Jr., Black, W. C., Babin, B., Anderson, J., & Rolph, E. (2014). *Multivariate data analysis*, 7th edition, London: Pearson.
- Han, Y., & Perry, J. L. (2020). Employee accountability: development of a multidimensional scale. *International Public Management Journal*, 23(2), 224-251. <https://doi.org/10.1080/10967494.2019.1690606>
- Hannah, M. T., & Freeman, J. (1984). Structural inertia and organizational change. *American Sociological Review*, 49(2), 149-164. <https://doi.org/10.2307/2095567>
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. London: SAGE Pub.
- Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modeling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6(1), 53-60. [10.21427/D7CF7R](https://doi.org/10.21427/D7CF7R)
- Hopkins, M. (2004). *Corporate social responsibility: An issues paper*, International Labour Office Working Paper No. 27, Geneva.
- Huck, S. W. (2012). *Reading statistics and research*. New York: Pearson.
- Jöreskog, K. G. & Sörbom, D. (1993). *LISREL 8: Structural equation modeling with the SIMPLIS command language*. Lincolnwood: Scientific Software International.
- Karagöz, Y., & Ağbektaş, A. (2016). Yapısal eşitlik modellemesi ile yaşam memnuniyeti ölçeğinin geliştirilmesi; Sivas ili örneği. *Bartın Üniversitesi İ.İ.B.F. Dergisi*, 7(13), 274-290.
- Kazanç, F. K. (2019). Gazzâlî'nin Fedâ'ihu'l-Bâtıniyye Adlı Eseri Müvâcehesinde Bâtınî Akımlarla Mücadele. M. K. Arıcan, M. E. Kala ve M. Tuğrul (Ed.) *Bilge Velir Nizamülmülk* (ss. 190-247). Konya: Konya Büyükşehir Belediyesi Kültür Yayınları.
- Kilis, S., & Yıldırım, Z. (2018). Sorgulayıcı öğrenme topluluğu üst biliş ölçeğinin Türkçeye uyarlanması: Geçerlik ve güvenilirlik çalışması. *KEFAD*, 19(1), 665-679.
- Kitana, A. (2016). Overview of the managerial thoughts and theories from the history: Classical management theory to modern management theory. *Indian Journal of Management Science*, 6(1), 16-21.
- Klir, G. J. (1969). *An approach to General Systems Theory*. New Jersey: Princeton University Press.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd Edition). New York: Guilford Press.
- Koç, E. (2015). Nizamülmülk ve siyaset düşüncesi. M. Akıncı & G. N. Şafak (Ed.) *1. Türk İslam Siyasi Düşüncesi Kongresi Bildiriler Kitabı* (ss. 493-502). 8-10 Ekim, Aksaray: Aksaray Üniversitesi.
- Koçel, T. (1998). *İşletme yöneticiliği*, İstanbul: Beta Basım Yayın Dağıtım.
- Koçel, T. (2005). *İşletme yöneticiliği*, İstanbul: Arıkan Basım Yayım Dağıtım.
- Koontz, H. (1961). The Management theory jungle. *Journal of the Academy of Management*, 4(3), 174-188. <https://doi.org/10.5465/254541>
- Köklü, N., Büyüköztürk, Ş. & Bökeoğlu, Ç.Ö. (2013). *Sosyal bilimler için istatistik*, 12. Baskı. Ankara: Pegem Yayıncılık.
- Lincoln, J. R., Jon, O., & Mitsuyo, H. (1978). Cultural effects on organizational structure: The case of Japanese firms in the United States. *American Sociological Review*, 43(6), 829-847. <https://doi.org/10.2307/2094624>
- Luecke, R. (2015). *Strateji*. (T. Parlak, Çev.), İstanbul: İş Bankası Kültür Yayınları.
- Luthans, F. (1973). *Organizational behavior*. New York: McGraw Hill.
- MacKenzie, S. B., Podsakoff, P. M., & Podsakoff, N. P. (2011). Construct measurement and validation procedures in MIS and behavioral research: Integrating new and existing techniques. *MIS Quarterly* 35(2), 293-334. <https://doi.org/10.2307/23044045>
- Messick, S. (1995) Validity of psychological assessment: Validation of inferences from persons' responses and performances as scientific inquiry into score meaning. *American Psychologist* 50(9), 741-749. <https://doi.org/10.1037/0003-066X.50.9.741>
- Meyer, M. (1968), Two authority structures of bureaucratic organization, *Administrative Science Quarterly*, 13(2), 211-228. <https://doi.org/10.2307/2391452>
- Miles, R. H. (1980). *Macro organizational behavior*. Arizona: Goodyear Pub.
- Mintzberg, H. (2014). *Örgütler ve yapıları*. (A. Aypay, Çev.) Ankara: Nobel Akademik Yayıncılık.
- Mulder, P. (2018). *POSDCORB*. Erişim Adresi: <https://www.toolshero.com/management/posdcorb-theory/>
- Mullins, L. J. (2005). *Management and organizational behavior*. New York: Pearson.
- Mullins, L. J. (2013). *Approaches to organization and management*. New York: Pearson.

- Nizamülmülk (2018). *Siyasetname*. (M. T. Ayar, Çev.), İstanbul: Türkiye İş Bankası Kültür Yayınları.
- Ouchi, W. (1981). *Theory Z: How American business can meet the Japanese challenge*. UK: Avon Books.
- Özdemir A., & Tan F. Z. (2023). The impact of digital transformation on organizational agility. Ankara: Nobel Yayın Dağıtım.
- Pearce, J. A., & Robinson, R. B. (2015). *Stratejik yönetim*. 12. baskı, (M. Barca, Çev.) Ankara: Nobel Yayın Dağıtım.
- Perrini, F., & Pogutz, S. (2006). *Developing Corporate Social Responsibility: A European Perspective*, Massachusetts: Edward Elgar Publishing.
- Pfeffer, J., & Salancik, G. R. (1978). *The External control of organizations- A Resource dependence perspective*. New York: Harper & Row, Publishers.
- Phesey, D. C. (1993). *Organizational cultures: Types and transformations*. New York: Routledge Publisher.
- Raykov, T., & Marcoulides, G. A. (2006). *A first course in structural equation modeling*. New Jersey: Lawrence Erlbaum Associates.
- Robins, A. J. (1987). Organizational economics: Notes on the use of transaction-cost theory in the study of organizations. *Administrative Science Quarterly*, 32(1), 68-86. <https://doi.org/10.2307/2392743>
- Seçer, İ. (2015). *SPSS ve LISREL ile pratik veri analizi*. 2. baskı. Ankara: Anı Yayıncılık.
- Sethia, N. K., & Glinow, M. A. V. (1988). Arriving at four cultures by managing their ward system. In R H Kilmann; M. J. Saxton; R. Serpa (Eds.), *Gaining control of the corporate culture* (ss. 155-185). San Francisco Oxford Jossey-Bass.
- Sezginer, S. (2014) *Türk yöneticilerinin kişilik özellikleri ve Türk kültürünün yönetim üzerine etkileri*. Ankara: ST Clements Üniversitesi.
- Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., & King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of Educational Research*, 99(6), 323-338. <https://doi.org/10.3200/JOER.99.6.323-338>
- Scott, R. (1992). *Organizations: Rational natural and open systems*. 3rd edition. New Jersey: Prentice-Hall.
- Şimşek, O. (2019). Nizamülmülk (1018-1092). M. Akçakaya (Ed.) *Türk-İslam tarihinde yönetim bilgeleri* (ss. 55-92). Ankara: Gazi Kitabevi.
- Tavşancıl, E. (2014) *Tutumların ölçülmesi ve SPSS ile veri analizi*. 5. baskı. Ankara: Nobel Akademik Yayıncılık.
- Thomson, A. M., Perry, J. L., & Miller, T. K. (2007). Conceptualizing and measuring collaboration. *Journal of Public Administration Research and Theory*, 19(1), 23-56. <https://doi.org/10.1093/jopart/mum036>
- Tunç, A., & Çarkıt, M. (2019). Nizamülmülk'ün Türk-İslam yönetim geleneğine yaptığı katkılar. *Management and Political Sciences Review*, 2(2), 29-51.
- Turan, R. (2019). Devlet ve kader adamı bir şahsiyet: Nizâmülmülk, M. K. Arıcan, M. E. Kala ve Mehmet Tuğrul (Ed.) *Bilge Vezir Nizamülmülk* (ss. 12-21), Konya: Konya Büyükşehir Belediyesi Kültür Yayınları.
- Turan, E., & Şahin, M. Y. (2016). Yönetim ve kamu yönetiminin genel nitelikleri. E. Turan (Ed.), *Kamu yönetimi temel kavramlar* (ss. 15-73). Konya: Palet Yayınları.
- Taş, A. (2007). *Türk yönetim tarzı (örgütlenme, sahiplik, insan kaynakları ve stratejik yönetim boyutlarıyla)*. (Doktora Tezi), Sakarya Üniversitesi Sosyal Bilimler Enstitüsü, Sakarya.
- Usher, E. L., & Pajares, F. (2009). Sources of self-efficacy in mathematics: A Validation study. *Contemporary Educational Psychology* 34(1), 89-101. <https://doi.org/10.1016/j.cedpsych.2008.09.002>
- Wang, K. C., Hsieh, A. T., Chou, S. H., & Lin, Y. S. (2007). GPTCCC: An instrument for measuring group package tour service. *Tourism Management*, 28(2), 361-376. <https://doi.org/10.1016/j.tourman.2006.04.017>
- Warner, M. (2003). *Culture and management in Asia*. London: Routledge Curzon.
- Yasin, O. (2013). Modern management theories and practices. *Main Issues of Pedagogy and Psychology*, 1(2), 15-27. <https://doi.org/10.24234/miopap.v2i2.265>
- Yi, Y., & Gong, T. (2013). Customer value co-creation behavior: Scale development and validation. *Journal of Business Research*, 66(9), 1279-1284. <https://doi.org/10.1016/j.jbusres.2012.02.026>