

Developing a power scale based on Etzioni's organizational commitment classification for school principals

Journal of Teacher Development and Education
2(2), 70-85,
<https://journalted.com/>

DOI: 10.29329/journalted.32

Received: 27/10/2024

Revised: 08/12/2024

Accepted: 12/12/2024

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Abstract

This study aims to develop a validated and reliable scale grounded in Amitai Etzioni's organizational compliance framework, addressing a gap in measuring coercive, remunerative, and normative power types in educational leadership. While there are scales in the literature designed to measure the types of power used by school principals, no scale has been identified that corresponds to Amitai Etzioni's classification of power types—coercive, remunerative, and normative—used to explain organizational compliance (normative, calculative, and alienative). The power sources employed by school principals are crucial for influencing school stakeholders and directing them toward organizational goals. Etzioni's classification of power types is notably straightforward and comprehensive, and when developed as a scale, it can be utilized alongside other measurement tools. Therefore, there is a need for a concise, practical, and validated scale to measure the types of power used by school principals. The analyses were conducted on data from 580 primary school teachers working in public schools. The development and validation processes were carried out in multiple steps. The literature was reviewed, in-depth interviews were conducted with school stakeholders, and an item pool was created. The suitability of the scale items for Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) was tested, yielding a Kaiser-Meyer-Olkin (KMO) value of 0.904 and a significant Bartlett's Test of Sphericity. According to the CFA results, the model fit was appropriate, and the correlation between factors and items was satisfactory. Based on the results, a three-factor scale comprising 15 items was developed. School principals' power types were conceptualized as a multidimensional construct with three dimensions: normative power, remunerative power, and coercive power. As a result of the analyses, it was concluded that the "Scale of Power Types Used by School Principals," defining 15 items across three dimensions, is acceptable and applicable.

Keywords: School Principals, Power Types, Scale Development

Cite: Köşker, A., & Tonbul, Y. (2024). Developing a power scale based on Etzioni's organizational commitment classification for school principals. *Journal of Teacher Development and Education*, 2(2), 70-85. <https://doi.org/10.29329/journalted.32>

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INTRODUCTION

School principals extensively exercise their authority in all administrative processes of the school. Beyond their legal authority, they also utilize different types of power to influence school stakeholders and guide them toward the designated goals. Nesler et al. (1999) highlighted that different researchers have defined power in various ways. Among these, Mechanic (1962) described power as "control over resources," while McClelland (1975) regarded it as "a personality trait." Dahl (1957) defined power as "the ability to modify the behavior of a target or to overcome resistance at a certain level." Benner (1984) equated power with "authority," whereas Salancik and Pfeffer (1977) conceptualized it as "the ability to get things done." In management studies, scholars often consider power as social power, which defines the relationship between power and influence. Researchers use social power as a concept to explain the dynamics of influence within social interactions. French and Raven (1959) developed a significant framework for social power and introduced a five-factor classification of power. These factors include reward power, coercive power, legitimate power, referent power, and expert power. Reward power depends on the ability to provide rewards; coercive power relies on the ability to impose penalties; legitimate power emerges from recognizing the right to exert influence; referent power derives from the desire for identification; and expert power stems from the perception of specialized knowledge. These power types allow an agent (O) to influence a target (P) from various perspectives, clarifying the dynamics of social relationships (Aslanargun, 2009).

One of the prominent researchers who has contributed significantly to studies on power is Amitai Etzioni. Etzioni has deeply engaged with the concept of power and explored its implications within organizational operations. Etzioni (1968a, 1968b) defines power as a general capability to reduce resistance to social change. Researchers consider this definition more realistic and applicable to social analyses. According to Etzioni, power in one domain (e.g., the economy) does not directly translate to power in another (e.g., religion), although interactions occur. For instance, the differences in the international influence of small and large countries, which depend on their economic and military power, illustrate this interaction. Etzioni focuses on societal power and examines its macro-level applications and outcomes rather than concentrating on individuals or small groups. Social actors use power in varying forms and degrees. However, Etzioni rejects the idea that all types of power are coercive and emphasizes the existence of different types of power (e.g., economic power) and their sources. Etzioni (1961; 1975: 68-94) categorizes power into coercive power (military intervention), utilitarian power (economic incentives), and persuasive power (propaganda disseminated through media). In communities, actors often combine these types of power.

In his subsequent analytical and empirical studies, Etzioni introduced new classifications concerning types of power, forms of participation, and compliance relationships. He identified high-level individuals in organizations as elites, institutional representatives, or upper participants and referred to lower-level individuals as subordinate participants. This classification examines the power dynamics at different levels within organizations. Etzioni (1961; 1976) redefined types of power in organizations as coercive power (disciplinary measures, punitive sanctions), remunerative power (financial incentives such as salary increases and bonuses), and normative power (leaders enjoy privileges and hold prestigious titles). Etzioni (1968b) conceptualized societies as complex systems that use various types of power and analysed the relationships between these types of power and levels of alienation within this framework.

According to Etzioni (1968b), elites who employ coercive power often create highly alienated subordinate participants (e.g., prisoners). In contrast, elites who use normative power typically foster subordinate participants with lower levels of alienation (e.g., students in progressive educational institutions). Subordinate participants working under elites who rely on remunerative power generally show moderate levels of alienation (e.g., factory workers). Etzioni's (1968a) *Theory of Societal Self-Control* examines the conditions that allow various types of power to function minimally and explores ways to establish a non-alienating structure of societal self-control. This theory bases compliance structures within societies and organizations on the relationships between the enforcers of these structures and the individuals they influence.

Etzioni argues that coercive compliance causes high levels of alienation (e.g., in concentration camps), remunerative compliance creates moderate levels of alienation (e.g., workers in the automotive industry), and

normative compliance generates low levels of alienation (e.g., in religious institutions). Etzioni (1961; 1964; 1965; 1969; 1976) observes that societies and administrations rarely abandon the use of power and notes that compliance types vary across different subunits while societies typically prefer less coercive methods at higher levels. In an active society, citizens are expected to show lower levels of alienation, greater reliance on normative control, and higher responsiveness. The theory of compliance examines relationships between dominators and the dominated as typical examples. These structures rely on power and cause high alienation (coercive compliance), rewards and result in moderate alienation (remunerative compliance), and normative control and lead to low alienation (normative compliance). Although Etzioni did not create a specific power scale, he demonstrated how institutions use different types of power and how these power types produce distinct forms of compliance. According to Etzioni, when institutions use "coercive" power, employees develop hostile and detached attitudes toward the institution. He termed this form of compliance "alienated compliance." For instance, teachers who fail to internalize their work and display negative attitudes toward the school, parents, and students represent this type of compliance.

Etzioni suggests that applying "remunerative power" creates a form of "calculative compliance." In this type of compliance, material incentives such as salaries, bonuses, and rewards guide employees' behaviors. In schools, administrators often do not compensate for numerous tasks carried out within the scope of salaries—such as supervisory duties, taking work home, or attending meetings—or they may fail to match the compensation to the effort expended. Nevertheless, administrators can effectively influence employees by properly applying remunerative power. For example, institutions that facilitate postgraduate education, provide significant salary increases for degree completion, award high scores in promotions and assignments, or offer additional allowances for teachers engaged in projects to achieve positive outcomes when they implement these practices fairly. Otherwise, members may prioritize maximizing personal gain from their organization. On the other hand, the use of "normative power" creates a form of compliance referred to as "normative commitment." Society expects teachers to align with this dimension of compliance due to the profession's intrinsic values, such as its virtue, role in shaping individuals and society, opportunity to make meaningful impacts on people's lives, and capacity to offer personal and professional development. These characteristics strengthen society's expectation that teachers exhibit normative compliance.

Although Etzioni demonstrated how power shapes different types of commitment, he did not create a measurement tool to concretize the applications of power in workplace settings. On the other hand, researchers in the literature have developed various scales to measure power dynamics. The following section summarizes these scales.

French and Raven's (1959) Five Types of Power Classification explains how leaders influence others through different means: Reward Power allows leaders to motivate teachers through incentives; Coercive Power enables leaders to maintain discipline by using punitive measures; Legitimate Power stems from a leader's authority; Referent Power reflects a leader's personal qualities or their role model status, and Expert Power highlights a leader's management skills and knowledge that earn employees' respect. Leaders widely apply this classification in processes that aim to motivate and guide employees (Toptaş & Taştan, 2020; Özaslan, 2017; French & Raven, 1959; 1968).

Max Weber's Authority Types (1947). Weber identified three types of authority based on the forms of legitimization of power: Traditional Authority derives from traditions and cultural norms, Charismatic Authority depends on the leader's charisma, and Legal-Rational Authority relies on laws and rules. This classification explains how societies and institutions legitimize power relations within their structures (Özdemir, 2014; Bars, 2020; Weber, 2005; 2006; 2014). David McClelland's (1975) Need-Based Power Theory explains individuals' motivations based on their needs for power in three categories: Need for Independence reflects the desire for control, Need for Achievement demonstrates the aspiration to show success, and Need for Affiliation emphasizes the desire for group harmony and loyalty. This classification helps researchers understand how power needs shape individual motivations (Kozak & Deniz, 2022; Küçükçivil, 2019; Şentürk, 2023). Gary Yukl's Power and Influence Model (2009). This model combines leaders' power sources with influence strategies and identifies three core strategies: Rational Persuasion influences others through logical arguments, Inspirational Appeal motivates others by using vision and emotional appeal, and Coalition Building unites various power sources to achieve goals. This model connects how leaders use power to its effects on employees and provides a practical

guide for leaders to implement these strategies (Bakan & Büyükbeşe, 2010; Özşahin & Zehir, 2011; Polat & Arabacı, 2015).

One can argue that the sources of power school administrators use play a critical role in determining their ability to influence and guide interactions within the school environment. The power classifications outlined above offer both theoretical and practical frameworks for understanding how individuals or leaders influence others. French and Raven's power types examine every day intra-organizational power relations, while Etzioni's classification focuses on individuals' compliance with organizations. Weber's authority types describe power structures in social and cultural contexts, whereas researchers such as McClelland and Yukl analyse individual and organizational power dynamics through more specific applications. These classifications provide a robust foundation for understanding how individuals exercise power effectively in different contexts.

Research (Weindling & Earley, 2004) highlights that the effective and appropriate use of power plays a critical role in managing schools in alignment with their objectives. Researchers emphasize that school principals indirectly influence students' learning outcomes and significantly guide teachers' actions through their leadership styles. Moreover, the leadership style itself influences the type of power leaders use. Researchers identify a need for more in-depth studies to explore the relationship between leadership style and the types of power leaders utilize. For instance, transformational leaders often rely on expert and charismatic power, while transactional leaders combine legitimate power with these. Modern leadership approaches advocate distributing power with a focus on "learning," emphasizing that leaders should not concentrate power in a single individual. Leaders distribute power to facilitate decentralization and enable swift problem-solving, whereas centralized structures make the use of legitimate power more prominent. Similarly, leaders must align their use of power with the structure and goals of the organization. Consequently, in the Four-Frame Model (Bolman & Deal, 2008), researchers suggest that factors such as the nature of the institutional structure, human resources, the circumstances of those influencing and affected by processes, and the cultural norms of the organization hold as much importance as the leadership style itself.

As indicated in the explanations above, numerous variables influence the use of power in organizations. Therefore, researchers developing power scales should consider not only the types of power but also the outcomes these types produce (e.g., organizational compliance). Studies in the field of power types typically classify and analyse different power types to measure how leaders and managers influence employees within organizations. These studies hold a significant place, particularly in social psychology and management sciences. Although researchers have created scales to measure the types of power school principals use, a review of the literature shows that researchers have not developed scales based on Etzioni's organizational compliance model (coercive, remunerative, and normative power) due to the limitations of prior research. Etzioni's model suggests that organizations experience alienated, calculative, and normative compliance types depending on the type of power leaders' exercise. In this context, researchers could test the applicability of these compliance types to Etzioni's Compliance Theory within cultural (e.g., Türkiye) and sectoral (e.g., educational institutions) contexts to contribute to the theory's development. Additionally, incorporating different theories (e.g., leadership, conflict, school climate) and philosophies (e.g., existentialism, pragmatism, idealism) would provide valuable insights for future power scale development efforts and further enrich the theoretical and practical understanding of power dynamics in organizational settings.

Etzioni's classification provides an effective framework for school principals to influence stakeholders and guide them toward organizational goals. It stands out as a comprehensive model that researchers can use alongside other scales. Therefore, researchers need to develop a concise, practical, and highly valid scale. This study aims to identify the types of power school principals use and contribute to the literature by introducing a valid and reliable scale for this purpose. The scale that researchers develop will enable a better understanding of how principals' use of power (coercive, remunerative, normative) impacts stakeholders. This study focuses on teachers, but researchers could validate the scale with diverse stakeholder groups, such as students and parents, in future studies to assess its applicability across varying perspectives. Such validation would help develop more harmonious and effective management styles in the workplace. Additionally, researchers expect the short and practical nature of the scale to allow its application to larger samples in the field. A brief scale aligned with Etzioni's organizational compliance model could serve the field effectively and integrate with other scales, such as those measuring leadership, commitment, or organizational depression, to facilitate broader applications.

Researchers using this scale alongside other power scales could examine the relationships between school leaders' use of power, organizational compliance, and employee behaviours in greater detail. In conclusion, developing a concise scale compatible with Etzioni's organizational compliance model will enrich theoretical discussions and offer new insights specific to educational leadership, enabling researchers and practitioners to make significant contributions to the field.

METHOD

Research Design

In this study, researchers systematically reviewed the literature on the types of power school principals in Türkiye use and developed a valid and reliable scale to measure this power.

As part of the research, the researchers conducted a pilot study with 580 teachers selected through random sampling. They applied Bartlett's test to assess the adequacy of the sample and found that the chi-square value was significant at the 0.00 level. This result demonstrates that the sample of 580 teachers sufficiently represents the population.

Sampling

The study employed the simple random sampling method. In this method, researchers ensure that each unit in the population has an equal probability of being selected. They first list the units and then randomly select them from this list. Researchers find this method particularly effective when the population is not large or complex. Additionally, simple random sampling enables researchers to easily calculate sampling errors (Özdamar, 1999).

The researchers tested the School Principals' Power Types Scale, developed within the scope of the research, on a participant group of 580 individuals. They conducted the pilot application of the scale with 580 primary school teachers using the simple random sampling method. To evaluate the adequacy of the sample in representing the population, the researchers conducted a Bartlett's test and found that the chi-square value was significant at the 0.00 level. This result demonstrates that the sample of 580 teachers sufficiently represents the population. Table 1 presents the details regarding the sampling process.

Table 1. Distribution of Participants According to Socio-Demographic Characteristics (n=580)

Variable		n	%
Gender	Male	129	22.2
	Female	451	77.8
Age	20-25	5	0.9
	26-30	23	4.0
	31-35	58	10.0
	36-40	98	16.9
	41 and above	396	68.3
Educational Level	Undergraduate	437	75.3
	Postgraduate	56	9.7
	Associate Degree	87	15.0
	Religious Education Teacher	10	1.7
Teaching Field	English Teacher	34	5.9
	Preschool Teacher	86	14.8
	Guidance Counsellor	29	5.0
	Classroom Teacher	421	72.6
Professional Experience	1-5 years	10	1.7
	6-10 years	52	9.0
	11-15 years	79	13.6
	16-20 years	118	20.3
	21 years and above	321	55.3
School's Socio-Economic Environment	Low	184	31.7
	Medium	218	37.6
	High	178	30.7

Data Collection Instrument

To identify the proposed dimensions related to the types of power school principals use, the researchers conducted a comprehensive and systematic literature review. They also consulted researchers with expertise in this field and utilized their expert opinions. In this context, the researchers presented the developed questions to multiple experts in the field for evaluation. Based on the contributions of these researchers and experts, the team created a pool of questions as the foundation for developing the scale.

During the creation of the item pool, the researchers used Etzioni's Organizational Commitment Model (organizational compliance types) as a basis and initially generated a pool of 75 items. They considered the opinions of school administrators and teachers pursuing doctoral and master's degrees in the field and academics specializing in educational administration and measurement and evaluation. Subsequently, they reduced the number of items to 15. Additionally, the researchers sought feedback from Turkish language teachers to ensure the clarity and comprehensibility of the scale. Table 2 presents a brief example of the items the researchers developed for each dimension, corresponding to school organizational processes, in line with Etzioni's Organizational Commitment Model.

Table 2. Comparison of the Developed Scale with Etzioni's Organizational Commitment Model

Organizational Commitment Model	Items of the Developed Scale
Alienative Commitment (Example item: "I feel trapped.")	Emphasizes rules or responsibilities through verbal and official channels in every setting, causing teachers to feel trapped.
Calculative Commitment (Example item: "I put in my best effort if my contributions to the school are recognized and appreciated.")	It indicates that teachers will not contribute to the school unless it aligns with their interests.
Moral Commitment (Example item: "I feel dedicated to my school.")	Respects teachers' voluntary organization of activities beyond their defined duties to enhance the school's academic success.

Implementation and Analysis

Before implementing the study, the researchers obtained ethical approval. Subsequently, they conducted Exploratory Factor Analysis (EFA) using data collected from 580 participants. Factor Analysis (FA) organizes data to facilitate the application of statistical techniques. This approach allows researchers to analyze sets of variables related to their topic by grouping them into relatively independent and consistent subsets, focusing on the relationships among these variables (Tabachnick & Fidell, 2013: 612). Researchers can use the identified factors and their scores in advanced statistical analyses.

Based on the pilot study results, the researchers evaluated the scale's reliability using Cronbach's alpha coefficient. They calculated the overall reliability coefficient as 0.814, with sub-dimension coefficients as follows: Factor 1 = 0.907, Factor 2 = 0.876, and Factor 3 = 0.926. After analyzing the pilot study data, the researchers conducted the study's main application.

After completing the validity and reliability analyses, the researchers finalized the School Principals' Power Types Scale. The scale includes 15 items and uses a 5-point Likert-type rating system. Participants rate the items from "Strongly Agree" (5) to "Strongly Disagree" (1). The researchers designed the scale without any reverse-scored items. Instead of calculating a total score, they evaluate each sub-dimension separately, with possible scores ranging from 5 to 25 for each sub-dimension. The researchers created this scale to provide a reliable and valid instrument for measuring the types of power school principals' use.

Data Collection Process

Before initiating the data collection process, researchers obtained the necessary permissions. Researchers collected data from public primary school teachers through face-to-face interviews and Google Forms. Researchers provided participants with detailed explanations regarding the purpose and use of the measurement tool. Researchers meticulously reviewed the collected data before analysis and excluded the responses of participants who completed the measurement tool incorrectly or incompletely. Researchers implemented this process to enhance the accuracy and reliability of the data.

Data Analysis

Researchers conducted all statistical analyses in the study using SPSS and AMOS software. Researchers applied Exploratory Factor Analysis (EFA) to structure the School Principals' Power Types Scale. They performed an internal consistency analysis to identify any issues that might prevent using the scale in the study. Additionally, researchers tested the adequacy of the relationships between the scale's factors using Confirmatory Factor Analysis (CFA). They conducted reliability analyses of the scale in detail and presented the corresponding results in the findings section.

Researchers used Cronbach's Alpha coefficient (α value) to assess the reliability of the sub-dimensions. The criteria for interpreting Cronbach's Alpha values are as follows (Özdamar, 1999: 513):

- $\leq \alpha < 0.40$: Not reliable
- $0.40 \leq \alpha < 0.60$: Low reliability
- $0.60 \leq \alpha < 0.80$: Fairly reliable
- $0.80 \leq \alpha \leq 1.00$: Highly reliable

FINDINGS

Researchers presents the findings related to the results of Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) in detail below.

Exploratory Factor Analysis (EFA)

Exploratory Factor Analysis (EFA) groups related variables, facilitating the explanation and summarization of data (Tabachnick & Fidell, 2013: 614).

Alongside factor analysis, researchers should conduct the Kaiser-Meyer-Olkin (KMO) Test and Bartlett's Test. These tests assess the suitability of the data for factor analysis. The KMO test measures sampling adequacy and indicates how appropriate the scale is for factor analysis (Orduluoğlu, 2019).

Table 3. Accepted KMO Values in Scientific Assessment

Criterion	Description
$1,00 < KMO \leq 0,90$	Excellent
$0,90 < KMO \leq 0,80$	Very Good
$0,80 < KMO \leq 0,70$	Good
$0,60 < KMO \leq 0,70$	Moderate
$0,50 < KMO \leq 0,60$	Poor
$0,50 < KMO$	Bad

Source: (Kaiser ve Rice, 1974: 112-117).

For the Kaiser-Meyer-Olkin (KMO) test, researchers must obtain a value greater than 0.50. Values below 0.50 indicate that the scale does not suit factor analysis (Field, 2000: 696). Table 4 shows the results of the Kaiser-Meyer-Olkin (KMO) and Bartlett's tests for the School Principals' Power Types Scale. Researchers used these tests to evaluate the suitability of the data for factor analysis.

Table 4. KMO and Bartlett's Tests

Kaiser-Meyer-Olkin Test		0,904
Bartlett's Test	Approximate Chi-Square	6350,143
	Degrees of Freedom	105
	P-Value (P)	.000

The analysis revealed a KMO value of 0.904 for the School Principals' Power Types Scale. A KMO value greater than 0.50 (0.904 in this case) and its classification in the literature as "excellent" (Kaiser & Rice, 1974) demonstrate that the scale suits factor analysis. Furthermore, Bartlett's Test result showed significance ($p = 0.000$), indicating that the sample size was adequate. Researchers calculated the chi-square value for factor analysis suitability as $\chi^2 (105) = 6350.143$; $p < 0.05$.

After confirming that the School Principals' Power Types Scale, consisting of 15 items, met the requirements for factor analysis, researchers applied Exploratory Factor Analysis (EFA) to the scale items. As part of the EFA, they employed the Principal Component Analysis method and used the Varimax Rotation Technique, one of the orthogonal rotation methods.

Researchers calculated the factor loadings of the items resulting from the Varimax rotation technique and present these values in Table 5.

Table 5. Factor Analysis Results of the Power Types Used by School Principals Scale

Sub-Dimension	Scale Items	Factor Loadings		
Value-Based Power	14: Respects teachers' voluntary organization of activities beyond their defined duties to enhance the school's academic success.	,900		
	13: Appreciates teachers exhibiting behaviour as if they are school employees outside of their working hours.	,879		
	12: Values teachers sharing their professional knowledge with one another.	,871		
	15: Emphasizes the importance of teachers expressing positive opinions about the institution outside of school.	,868		
	11: Appreciates teachers who, despite having no official duties, perform school-related tasks with a sense of dedication.	,837		
Coercive Power	2: Ignoring teachers' expectations (e.g., course allocation, duty scheduling), causing resentment among them.	,881		
	3: Emphasizing rules or responsibilities through verbal and official channels in every setting, leading teachers to feel trapped.	,876		
	1: Creates feelings of revenge by assigning excessive workloads to some teachers or delaying their tasks.	,865		
	4: Rejects teachers' suggestions and requests aimed at improving school performance, believing the school will not change.	,710		
	5: Considers teachers' support on school-related matters as part of their duties.	,638		
Calculative Power	9: Believes that teachers will not exert effort unless they receive financial incentives.	,830		
	7: States that teachers will not contribute to the school unless it aligns with their personal interests.	,813		
	8: Emphasizes that merely reminding teachers of the possibility of receiving rewards can motivate them.	,803		
	6: Expresses that teachers will only make an effort if their performance is recognized and rewarded.	,743		
	10: Believes that teachers will support the school to the extent that they feel supported by the administration.	,678		
Eigenvalue		6,228	3,378	1,417
Explained Variance (%)		44,518	22,520	9,449
Total Explained Variance (%)		73,487		

The factor analysis on the School Principals' Power Types Scale revealed a three-factor structure with eigenvalues greater than 1.00. Researchers also observed this three-factor structure clearly in the scree plot (Figure 1). They calculated the variance explained by these factors as follows: 22.520% for the Coercive Power Sub-dimension, 9.449% for the Calculative Power Sub-dimension, and 44.518% for the Value-based Power Sub-dimension. Researchers determined the total variance explained by the scale as 73.487%.

While researchers generally expect an increase in the number of factors to result in a higher explained variance, in social sciences, they consider a total variance explained between 40% and 60% sufficient (Tavşanlı, 2005). In this context, researchers regard the total explained variance of the scale as adequate.

The factor loadings of the scale items must exceed 0.30 (Büyüköztürk, 2010). The analysis showed that all items had factor loadings greater than 0.30. Additionally, the differences between the factor loadings of items in different factors must be at least 0.10 (Büyüköztürk, 2010). The analysis in this study confirmed that the

differences in factor loadings among the three factors exceeded 0.10. These findings confirm that the factor structure of the scale is both valid and reliable. Figure 1 illustrates the scree plots for the 15-item dataset.

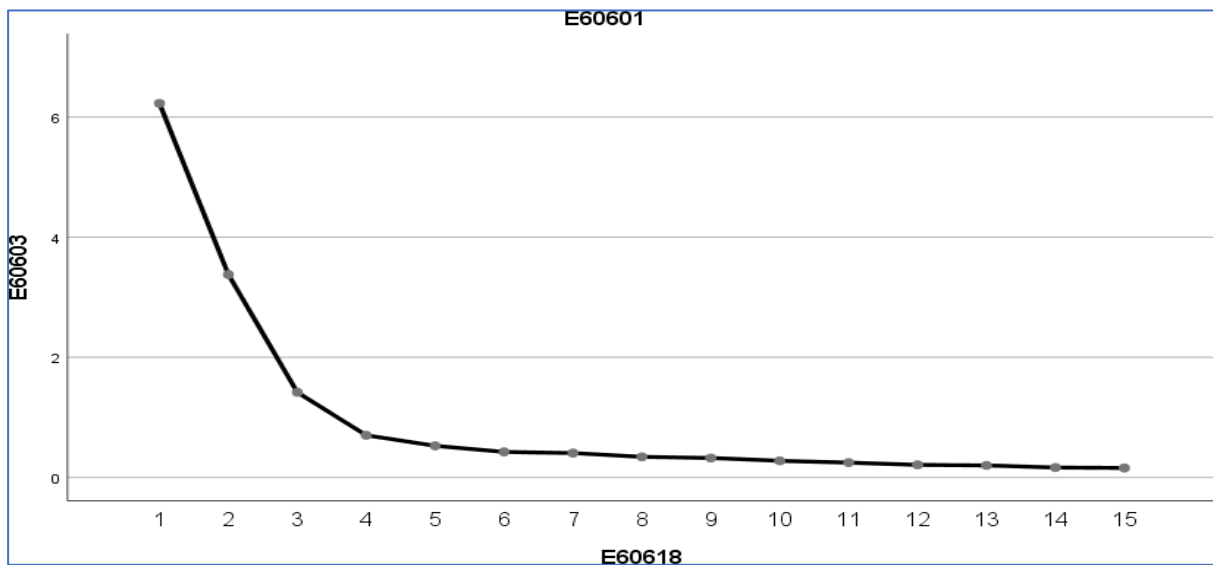


Figure 1. Scree plot of the power types used by school principals scale

When researchers examined the scree plot (Figure 1), they observed that the line exhibits horizontal levelling after the breakpoints where steep drops occur. DeVellis (2017) notes that researchers can use the breakpoints in the graph, where the line begins to level off, as a criterion for determining the appropriate number of factors. Based on this guidance, researchers analysed the distribution of the graph and identified three breakpoints, confirming that the scale comprises three sub-dimensions.

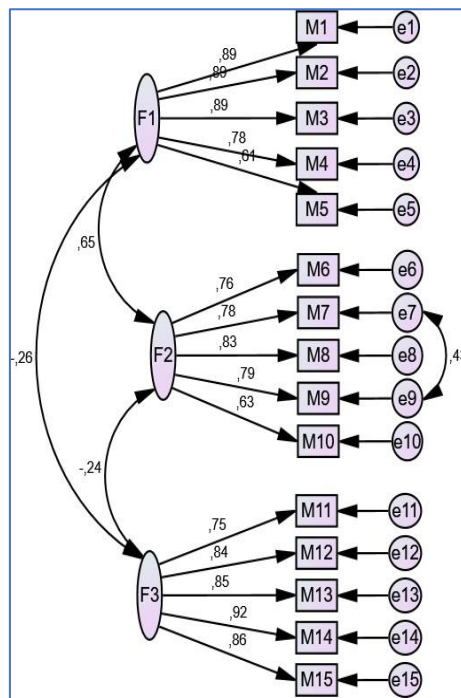
Confirmatory Factor Analysis (CFA)

Researchers use Confirmatory Factor Analysis (CFA) as a more advanced analytical method in later stages of research to test theoretical relationships between latent variables (Tabachnick & Fidell, 2013: 614). In this study, the researchers conducted CFA using the AMOS software to evaluate the structural validity of the three factors identified through Exploratory Factor Analysis.

According to the first-order CFA results, the analysis showed that the item factor loadings (λ) ranged as follows: For the Coercive Power Sub-dimension, the loadings ranged between 0.64 and 0.89, for the Calculative Power Sub-dimension, the loadings ranged between 0.60 and 0.87, and for the Value-based Power Sub-dimension, the loadings ranged between 0.75 and 0.92. Kline (2010) states that standardized factor loadings of 0.30 indicate a medium effect size, while values of 0.50 and above reflect a large effect size. Accordingly, the CFA results indicate a large effect size for the item factor loadings. Researchers presents the fit indices and graphical distribution derived from the CFA in Figure 2.

The fit indices presented in Figure 2 show that the Power Types Scale did not meet the ideal fit indices within the boundary values. When researchers examined the modification index values, they determined that the relationship between the error covariances of items E7 and E9 required consideration. They applied a modification between these items.

Before the modification, researchers calculated the Comparative Fit Index (CFI) as 0.836 and the Goodness of Fit Index (GFI) as 0.805. After applying the modification, they improved these values to CFI = 0.903 and GFI = 0.901, respectively. This improvement aligns with the explanation provided by Büyüköztürk et al. (2010), who states that "pairs of items belonging to the same latent variable and having similar meanings" can account for such adjustments. This modification enhanced the model's fit level and strengthened the validity of the scale's factor structure. Fit indices related to CFA were given in Table 6.



Chi-square= 401,849; Degrees of freedom= 86; Probability level=0,000; RMSEA=0,080

Figure 2. Path diagram of the sub-dimensions of the power types used by school principals' scale

Table 6. Evaluation of the CFA Model

Fit Indices	Perfect Fit	Acceptable Fit	CFA Result: Calculated Values	Fit Status
χ^2 / df	$.00 \leq \chi^2 / df \leq 3.00$	$3.00 < \chi^2 / df \leq 5.00$	4,673	Acceptable Fit
RMSEA	$.00 \leq RMSEA \leq .05$	$.05 < RMSEA \leq .1$	.080	Acceptable Fit
NFI	$.90 \leq NFI \leq 1.00$	$.80 \leq NFI < .90$	.937	Perfect Fit
CFI	$.90 \leq CFI \leq 1.00$	$.80 \leq CFI < .90$	.950	Perfect Fit
GFI	$.95 \leq GFI \leq 1.00$	$.85 \leq GFI < .95$	.912	Acceptable Fit
AGFI	$.95 \leq GFI \leq 1.00$	$.80 \leq GFI < .95$	.877	Acceptable Fit
IFI	$.95 \leq IFI \leq 1.00$	$.90 \leq AGFI < .95$	.950	Perfect Fit
$\chi^2: 401,849$		df: 86	p: 0,000	

Source: RMSEA (Büyüköztürk vd., 2010; Schumacker ve Lomax, 2004; Tabachnick ve Fidell, 2013; Yılmaz ve Çelik, 2009), CMIN/Df (Simon vd., 2010: 234-243), CFI (Dehon vd., 2005: 799-810), NFI (Hooper vd., 2008: 58-60; Hu ve Bentler, 1999: 1-55; Simon vd., 2010: 234-243), GFI (Simon vd., 2010: 234-243), AGFI (Forrest vd., 2000: 181-185; Simon vd., 2010: 234-243), RMSEA (Simon vd., 2010: 234-243), SRMR (Schermele-Engel vd., 2003: 23-74).

Considering the fit indices presented in Table 6, researchers deem the model to be at an acceptable level. According to Büyüköztürk et al. (2010), the following criteria indicate the level of model fit: RMSEA value ≤ 0.10 indicates an acceptable fit, NFI value ≥ 0.90 indicates excellent fit, AGFI value ≥ 0.80 indicates an acceptable fit, CFI value ≥ 0.90 indicates excellent fit, IFI value ≥ 0.95 indicates excellent fit, and GFI value ≥ 0.90 indicates an acceptable fit (Simon et al., 2010). Based on these criteria, researchers conclude that the model's fit level falls within acceptable limits.

Reliability Analysis

Researchers analyzed the reliability of the test using Cronbach's Alpha coefficient to evaluate internal consistency. Researchers commonly use Cronbach's Alpha as a reliability indicator for measuring the internal consistency of a scale. Researchers analyzed the final set of items for internal consistency using SPSS-22 software.

Researchers conducted internal consistency analysis for the sub-dimensions of the School Principals' Power Types Scale (Coercive Power Sub-dimension, Calculative Power Sub-dimension, and Value-based Power Sub-dimension).

Researchers also performed reliability analyses for the scale used as the data collection instrument in the study. Table 7 presents the results of the reliability analysis for the scale and its sub-dimensions in detail.

Table 7. Reliability Analysis Results of the Power Types Used by School Principals Scale

Scale	Cronbach's Alpha	Number of Items
Power Types Scale	0.814	15
Coercive Power	0.907	5
Calculative Power	0.876	5
Value-Based Power	0.926	5

Table 7 presents the Cronbach's Alpha values for the School Principals' Power Types Scale and its sub-dimensions. Researchers calculated the overall Cronbach's Alpha value for the scale as 0.814. For the sub-dimensions, they determined the following values: Coercive Power Sub-dimension: 0.907, Calculative Power Sub-dimension: 0.876, Value-based Power Sub-dimension: 0.926.

These Cronbach's Alpha values demonstrate that the School Principals' Power Types Scale is highly reliable and suitable for use in the study (Özdamar, 1999: 513).

The researchers conducted a split-half reliability analysis in the study. They used the split-half method, also referred to as a traditional method, which is one of the most used approaches for estimating test reliability due to its simplicity of application. This method allows researchers to calculate the reliability of a test based on a single administration by evaluating the consistency between two halves of the test.

In the study, the researchers applied the split-half method to perform an additional reliability analysis for the scale. They preferred this method for its practical application in estimating test reliability. Through this method, researchers assessed the reliability of the test by dividing it into two halves and measuring the correlation between them.

In this approach, researchers divided the items into two equivalent halves after administering the test. To balance the distribution of items, they typically grouped odd-numbered and even-numbered items separately and calculated the scores for each group independently (Başol, 2013). The model then calculates the correlation between these two halves, and researchers also determine Cronbach's Alpha coefficients for each half (Kalaycı, 2010).

The Split-Half Model evaluates the reliability of the scale using inter-form correlation coefficients. Researchers also incorporate additional measures such as Guttman Split-Half Reliability and Spearman-Brown Coefficients (for equal and unequal lengths) in the analysis results (Kalaycı, 2010). Based on these criteria, they conducted a reliability analysis using data from 580 participants. Their analysis, based on the 15 items of the scale, further confirmed its reliability and consistency. Reliability analysis findings were given in Table 8.

Table 8. Reliability Analysis Findings for the Scales

	Cronbach's α	Split-Half Reliability					
		First Half Cronbach's α	Second Half Cronbach's α	Equal-Length Spearman- Brown	Unequal-Length Spearman-Brown	Guttman split-half	Correlation Between Halves
Scale	.814	0.629	0.641	.933	.933	.931	.874

According to the results presented in Table 8, researchers grouped the scale items based on odd and even sequences and analysed them. The analysis revealed a Cronbach's Alpha value of 0.629 for the first group and 0.641 for the second group. The close similarity between the reliability values of both groups demonstrates that the groups are internally consistent.

Researchers calculated the inter-form correlation coefficient as 0.874, the Spearman-Brown coefficient for equal lengths as 0.933, the Spearman-Brown coefficient for unequal lengths as 0.933, and the Guttman Split-Half coefficient as 0.931. These values confirm that the scale exhibits a high level of reliability.

CONCLUSION, DISCUSSION, AND RECOMMENDATIONS

This study aimed to develop a concise, practical, and validated scale to measure the types of power school principals' use. Researchers based the scale on Amitai Etzioni's classification of organizational compliance types and subjected it to comprehensive expert reviews and appropriate sampling techniques before performing factor analysis.

As a result of the research, the researchers developed a 15-item scale with a three-factor structure. They identified these factors as Value-based Power, Calculative Power, and Coercive Power. The internal consistency indices and the overall Cronbach's Alpha coefficient of 0.814 confirm that the scale is both reliable and suitable for use.

This study focused on teachers, but researchers could validate the scale in future studies with diverse stakeholder groups, such as students and parents, to assess its applicability across varying perspectives. This approach would contribute to the development of more harmonious and effective management styles in the workplace.

Studies in the literature that measure the types of power school principals use remain limited. Researchers often fail to establish strong connections with theoretical contexts such as compliance-power, organizational philosophy-power, or ideological approach-power relationships. Therefore, this study addresses a significant gap. Researchers examining the relationship between leadership styles and power types in schools (e.g., Toprak, 2020; Brinia & Papantoniou, 2016; Bayrak et al., 2014; Zıblım & Ertürk, 2022; Yeşilbaş & Akyol, 2019) have shown that power types serve as functional tools for understanding leadership behaviors in educational institutions.

This study provides a power scale that researchers developed by examining the compliance-power relationship within the framework of Etzioni's commitment model. The researchers translated the types of power school administrators might use into clear, concrete, and actionable expressions based on school operations. Consequently, this research introduces a new tool for understanding and evaluating the types of power school principals employ. Researchers expect the scale to facilitate both researchers and practitioners in interpreting how Etzioni's organizational compliance theory reflects within schools.

Researchers can use the scale to evaluate how power types affect levels of compliance in schools. Specifically, they can examine whether the compliance types that result from coercive, calculative, and normative power align with or differ from Etzioni's organizational compliance typology. This examination could contribute to testing the theory within the context of school organizations. Such findings may lead researchers to develop new compliance typologies in the literature. Furthermore, researchers can study how the power types school principals prefer influence behaviors such as organizational citizenship, belongingness, or quiet quitting. These studies could deepen the understanding of Etzioni's compliance theory within the unique dimensions of educational institutions.

In conclusion, researchers can consider the scale developed in this study a sufficient and valid instrument for measuring the types of power school principals' use. Its concise structure, consisting of 15 items across three sub-dimensions, enables researchers to integrate it with other scales. Researchers can also use it as a valuable resource in studies aimed at understanding leadership behaviors in educational institutions or examining the outcomes of power types (e.g., organizational citizenship, institutional belongingness, quiet quitting, organizational depression).

Practitioners can use this scale, developed based on the organizational compliance model, to identify compliance typologies within their institutions. Testing the scale with different samples and enhancing it through contributions may help researchers develop more specific scales tailored to school levels and types. For instance, researchers could create scales specific to different institutional types, such as public or private schools, primary

or secondary schools, science high schools, vocational high schools, project schools, or Science and Arts Centers (BILSEM) to address the need for differentiation in scale items. Additionally, researchers could explore the reasons behind administrators' preferences for specific types of power, offering valuable directions for future studies.

Researchers introduced this scale to the educational administration literature and expect it to significantly contribute to creating more effective and efficient educational environments. The scale enables a better understanding and objectively measures school principals' leadership behaviors.

Statement of Researchers

Researchers' contribution rate statement: We declare that the authors have contributed to the research as co-authors.

Conflict statement: We declare no conflict of interest in preparing, implementing, collecting data, interpreting results, and writing this article.

Support and thanks: None.

REFERENCES

- Aslanargun, E. (2009). İlköğretim ve lise müdürlerinin okul yönetiminde kullandığı güç türleri [The power sources that principals handle in Turkish public elementary and secondary school administration]. [Doctoral thesis, Ankara University]. <https://tez.yok.gov.tr/UlusalTezMerkezi/>
- Bakan, İ., & Büyükbeşe, T. (2010). Liderlik “türleri” ve “güç kaynakları”na ilişkin mevcut-gelecek durum karşılaştırması. *Karamanoğlu Mehmetbey Üniversitesi Sosyal ve Ekonomik Araştırmalar Dergisi*, 12(12), 73-84.
- Bars, M. E. (2020). Max Weber'in Otorite Tanımı Çerçevesinde Türk Destan Kahramanlarına Farklı Bir Bakış Denemesi: Oğuz Kağan Örneği. *Karadeniz Sosyal Bilimler Dergisi*, 12(22), 251-266.
- Başol, G. (2013). *Eğitimde ölçme ve değerlendirme*. Ankara: Pegem Akademi Yayınları.
- Bayrak, C., Altinkurt, Y., & Yılmaz, K. (2014). The Relationship between school principals' power sources and school climate. *The Anthropologist*, 17(1), 81–91. <https://doi.org/10.1080/09720073.2014.11891417>
- Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing practice*. Menlo Park, CA: Addison-Wesley.
- Bolman, L., Deal, T. (2008). *Organizasyonları yeniden yapılandırmak* (Çev. A. Aypay, A. Tanrıöğen). Seçkin Yayıncılık.
- Brinia, V., & Papantoniou, E. (2016). High school principals as leaders: Styles and sources of power. *International Journal of Educational Management*, 30(4), 520-535. <https://doi.org/10.1108/IJEM-03-2015-0035>
- Büyüköztürk, Ş. (2010). *Sosyal bilimler için veri analizi el kitabı*. (11. Baskı). Pegem Akademi.
- Büyüköztürk, Ş., Şekercioğlu, G., & Çokluk, Ö. (2010). *Sosyal bilimler için çok değişkenli istatistik: SPSS ve LISREL uygulamaları*. (1. Baskı). Pegem Akademi.
- Dahl, R. A. (1957). The concept of power. *Behavioral Science*, 2(3), 201-215.
- Dehon, C., Weems, C. F., Stickle, T. R., Costa, N. M., & Berman, S. L. (2005). A cross-sectional evaluation of the factorial invariance of anxiety sensitivity in adolescents and young adults. *Behaviour Research and Therapy*, 43(6), 799–810. <https://doi.org/10.1016/j.brat.2004.06.008>
- DeVellis, R.F. (2017). *Scale development: Theory and applications*. (4th ed). Sage.
- Etzioni, A. (1961). *A comparative analysis of complex organizations; on power, involvement, and their correlates*. The Free Press of Glencoe, Inc.
- Etzioni, A. (1964). *Modern organizations*. Prentice-Hall, Inc.
- Etzioni, A. (1965). A stable union: the Nordic associational web (1953-1964). In A. Etzioni, (Eds.), *Political Unification Revisited: On Building Supranational Communities*. (pp. 184-228). Lexington Books.

- Etzioni, A. (1968a). Organizational dimensions and their interrelationships: a theory of compliance. In B.P. Indik, & F.K. Berrien (Eds.), *People, Groups and Organizations*. (pp. 94-109). Teachers College Press.
- Etzioni, A. (1968b). Social-psychological aspects of international relations. In G. Lindzey & E. Aronson (Eds.), *Handbook of Social Psychology* (Vol. 5, pp. 450-475). Addison-Wesley Publishing Company.
- Etzioni, A. (1969). *A sociological reader on complex organizations*. (2nd ed). Holt, Rinehart and Winston.
- Etzioni, A. (1975). *A comparative analysis of complex organizations: On power involvement, and their correlates*. The Free Press A Division of Macmillan Publishing Co., Inc. and Collier Macmillan Publishers.
- Etzioni, A. (1976). An engineer-social science team at work. *Research Management*, 19(1), 18-22. <http://www.jstor.org/stable/24117722>
- Field, A. (2000). *Discovering statistics using SPSS for Windows*. Sage publications.
- Forrest, S., Lewis, C. A., & Shevlin, M. (2000). Examining the factor structure and differential functioning of the Eysenck personality questionnaire revised—abbreviated. *Personality and Individual Differences*, 29(3), 579–588. [https://doi.org/10.1016/S0191-8869\(99\)00220-2](https://doi.org/10.1016/S0191-8869(99)00220-2)
- French, J. R. P., & Raven, B. (1959), *The basis of power*, D. Cartwright (Ed.), *Studies in social Power* (ss. 529-569), Ann Arbor, MI: University of Michigan Press.
- French, J. R. P., & Raven, B. (1959). The bases of social power. In J. M. Shafritz, J. S. Out & Y. S. Jang (Eds.), *Classics of Organization Theory* (p. 251-260). Cengage Learning.
- French, J. R. P., & Raven, B. (1968), *The bases for social power*. In D. Cartwright. (Ed.) *Studies in Social Power*. Ann Arbor, Michigan University of Michigan Press.
- Hooper, D., Coughlan, J., Mullen, M. (2008). Structural Equation Modelling: Guidelines for Determining Model Fit. *Electronic Journal of Business Research Methods*, 6(1), 53-60. <https://doi.org/10.21427/D7CF7R>
- Hu, L.-t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Kaiser, H. F., & Rice, J. (1974). Little Jiffy, Mark IV. *Educational and Psychological Measurement*, 34, 111-117. <https://doi.org/10.1177/001316447403400115>
- Kalaycı, Ş. (2010). *SPSS uygulamalı çok değişkenli istatistik teknikleri*. Ankara: Asil Yayın Dağıtım.
- Kline, R. B. (2010). *Principles and practice of structural equation modeling*. (3rd ed). Guilford
- Kozak, M. A., & Deniz, Ö. S. (2022). Öğrenilmiş İhtiyaçlar Teorisinin” Bir Otel Örneğinde Uygulanması. *Seyahat ve Otel İşletmeciliği Dergisi*, 19(3), 366-380.
- Küçükçivil, B. (2019). Tüketici davranışlarının etkilenmesinde McClelland'ın Motivasyon Kuramına yönelik bir inceleme. *Kritik İletişim Çalışmaları Dergisi*, 1(2), 79-102.
- McClelland, D. C. (1975). *Power: The inner experience*. New York, NY: Irvington.
- Mechanic, D. (1962). Sources of power of lower participants in complex organizations. *Administrative Science Quarterly*, 349-364.
- Nesler, M.S., Aguinis, H., Quigley, B.M., Lee, S.J., & Tedeschi, J.T. (1999). The development and validation of a scale measuring global social power based on French and raven's power taxonomy. *Journal of Applied Social Psychology*, 29(4), 750-769. <http://dx.doi.org/10.1111/j.1559-1816.1999.tb02022.x>
- Orduluoğlu, M. (2019). Kurumsal inovasyon stratejilerinin işletme performansına etkileri: Bir uygulama [The effects of corporate innovation strategies on business performance: An application]. [Unpublished master thesis, Istanbul Gelisim University]. <https://tez.yok.gov.tr/UlusalTezMerkezi/>
- Özaslan, G. (2017). *French ve Raven Perspektifiyle Kişilerarası Gücün Temelleri*. Yılmaz, E. ve Yılmaz, H. (Ed.) Eğitimden Damlalar içinde (s. 35-60). Konya: Palet Yayınları.
- Özdamar, K. (1999). *Paket program ile istatistiksel veri analizi*. Kaan Kitabevi.

- Özdemir, G. (2014). Weberyana anlamda Türklerde otorite ve meşruiyet ilişkisi (15. yüzyıl Osmanlı dönemine kadar). *Akademik İncelemeler Dergisi*, 9(2), 69-90.
- Özşahin, M., & Zehir, C. (2011). Yüksek performanslı işletmelerde liderlik, girişim odaklılık ve örgütsel performans ilişkisi. *Yönetim Bilimleri Dergisi*, 9(2), 115-140.
- Polat, M., & Arabacı, İ. B. (2015). A brief history of leadership and open leadership. *Route Educational and Social Science Journal*, 2(1), 207-232.
- Salancik, G. R., & Pfeffer, J. (1977). Who gets power—and how they hold on to it: A strategic-contingency model of power. *Organizational Dynamics*, 5(3), 3-21.
- Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online*, 8(2), 23-74. <https://doi.org/10.23668/psycharchives.12784>
- Schumacker, R. E., & Lomax, R. G. (2004). *A beginner's guide to structural equation modeling*. (2nd ed). Lawrence Erlbaum Associates Publishers.
- Simon, D., Kriston, L., Loh, A., Spies, C., Scheibler, F., Wills, C., & Härter, M. (2010). Confirmatory factor analysis and recommendations for improvement of the Autonomy-Preference-Index (API). *Health expectations: an international journal of public participation in health care and health policy*, 13(3), 234–243. <https://doi.org/10.1111/j.1369-7625.2009.00584.x>
- Şentürk, B. (2023). McClelland'in Motivasyon Teorisi: Başarı, İlişki ve Güç. <https://www.iienstitu.com/blog/mcclelland-in-motivasyon-teorisi-basari-iliski-ve-guc>
- Tabachnick, B.G., & Fidell, L. S. (2013). *Using multivariate statistics*. (6th ed). Pearson Education Limited.
- Tavşanlı, E. (2005). *Tutumların ölçülmesi ve SPSS ile veri analizi*. Nobel Yayınları.
- Toprak, M. (2020). Leadership in educational. *International Journal of Educational Administration, Management, and Leadership*, 1(2), 85-96. <https://doi.org/10.51629/ijeamal.v1i2.10>
- Toptaş, A., & Taştan, S. (2020). Liderlerin Kullandığı Güç Kaynaklarının Çalışanların Verimliliği Üzerindeki Rolünün Nitel Bir Araştırma ile İncelenmesi. *Business Economics and Management Research Journal*, 3(1), 63-80.
- Weber, M. (2005). *Bürokrasi ve otorite*. (Çev. B. Akın). Ankara: Adres Yayınları.
- Weber, M. (2006). *Sosyoloji yazıları*. (Çev.: T. Parla). İstanbul: İletişim Yayınları.
- Weber, M. (2014). *Toplumsal ve Ekonomik Örgütlenme Kuramı*. (Çev. Ö. Ozankaya). İstanbul: Cem Yayınevi.
- Weindling, D., & Earley, P. (2004). *Understanding school leadership*. Paul Chapman Publishing.
- Yeşilbaş, Y., & Akyol, B. (2019). Power sources used by school principals: A mixed-method study. *Journal of History Culture and Art Research*, 8(3), 17-31. <https://doi.org/10.7596/taksad.v8i3.2201>
- Yılmaz, V., & Çelik, H. (2009). *LISREL ile Yapısal Eşitlik Modellemesi-I*. Pegem Akademi.
- Yukl, G. (2009). Use power effectively to influence people. (Edit. Edwin A. Locke). In *Handbook of principles of organizational behavior: Indispensable knowledge for evidence-based management*, (pp. 349-365). Second Edition. United Kingdom: Wiley.
- Zıblım, L., & Ertürk, A. (2022). The organizational power applied by school principals and its effect on teachers' perception of power distance. *Participatory Educational Research*, 9(5), 26-42. <https://doi.org/10.17275/per.22.102.9.5>

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