



| Research Article / Araştırma Makalesi |

## Leadership Styles and Power Bases Preferences of Primary School Administrators from the Perspective of Preservice Science Teachers

### Fen Bilimleri Öğretmen Adaylarının Bakışıyla İlköğretim Okul Yöneticilerinin Tercih Ettikleri Liderlik Tarzları ve Güç Kaynakları

Selçuk Şahingöz<sup>1</sup>

#### Keywords

1. Leadership styles
2. Power bases
3. Preservice science teachers
4. Primary education
5. School administrators

#### Anahtar Kelimeler

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#### Abstract

*Purpose:* The aim of this study is to examine the types of leadership that primary school administrators exhibit and the power bases they utilize from the perspective of preservice science teachers.

*Design/Methodology/Approach:* Qualitative research design was applied in the study. The data were collected through the observations through 72 preservice science teachers during the Fall and Spring semesters and the assessment of the self-reports they prepared based on the semi-structured interviews with 18 school administrators.

*Findings:* According to the obtained data from the preservice science teachers, leadership style preferences of school principals are more in favor of instructional and moral leadership styles. The result is similar for school vice principals, but shared leadership style is also added to the mentioned leadership styles. The findings also show that the school administrators use legitimate and expert power bases more than the other power bases in educational administration process.

*Highlights:* The preservice science teachers additionally emphasized the school principals are greatly benefit from their charisma power on the contrary the school vice principals. On the other hand, they pointed out the school vice principals exhibit shared leadership more than the school principals. Last, the preservice teachers argued leadership preferences of the school administrators that aspect of science education related practices.

#### Öz

*Çalışmanın amacı:* Bu çalışmanın amacı, ilköğretim okul yöneticilerinin sergilediği liderlik tarzlarını ve kullandıkları güç kaynaklarını fen bilgisi öğretmen adaylarının bakış açısıyla incelemektir.

*Materyal ve Yöntem:* Çalışmada nitel araştırma yöntemi kullanılmıştır. Veriler, 72 fen bilgisi öğretmen adayının Güz ve Bahar dönemleri boyunca gerçekleştirdikleri gözlemleri ve 18 okul yöneticisiyle yaptıkları yarı yapılandırılmış görüşmelerden yola çıkarak hazırladıkları bireysel raporlarının değerlendirilmesi yoluyla toplanmıştır.

*Bulgular:* Fen bilgisi öğretmen adaylarının elde ettikleri verilere göre okul müdürlerinin liderlik tarzı tercihlerinin daha çok öğretimsel ve etik liderlik tarzları lehine olduğunu göstermektedir. Sonuç okul müdür yardımcılığı için de benzer olmakla birlikte, bahsedilen liderlik tiplerine paylaşılmış liderlik tarzı da eklenmiştir. Ayrıca bulgular okul yöneticilerinin eğitim yönetimi sürecinde yasal ve uzman güç kaynaklarını diğer güç kaynaklarına göre daha fazla kullandıklarını göstermektedir.

*Önemli Vurgular:* Fen bilgisi öğretmen adayları, ek olarak okul müdürlerinin karizma güçlerinden okul müdür yardımcılarının aksine büyük ölçüde yararlandıklarını vurgulamaktadır. Diğer yandan okul müdür yardımcılarının ise okul müdürlerinden daha fazla paylaşılmış liderlik sergilediklerini belirtmişlerdir. Son olarak, öğretmen adayları okul yöneticilerinin fen eğitimi ile ilgili uygulamalarını eleştirmişlerdir.

“You show me a school with a principal behind the desk, and I'll show you a school without principal leadership.”  
- Baruti Kafele -

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## INTRODUCTION

The needs of people have been changing with developing and changing society. Accordingly, the education system is also affected by this wind of change all around the world. Based on the contemporary education system, the goals and objectives of education has been revised. Thus, the mission and vision of education is redefined.

Although the education policies of the countries are determined by the governments, the implementers in schools are still school administrators. School administrators have important responsibilities for carrying out education in line with the determined educational goals. They should effectively contribute to the organization to enrich school environment and to arrive desired target (Aslanargun, 2011). School administrators demonstrate their skills in different ways in order to manage this process successfully. Therefore, they should exhibit leadership characteristics rather than administrators the purpose of achieving their schools' goals (Okutan, 2012). Many studies in the literature show the styles of leadership that school administrators exhibit and the power bases they prefer to use have an essential role in achieving the desired goals in school management (Diş & Ayık, 2016; Düru, 2015). According to Leithwood, Harris and Hopkins (2008), leadership of school administrator promote to enhance student academic achievement, to apply proper leadership style depends on the circumstance, to motivate teachers through indirect ways such as increasing their commitment and improving their working conditions.

In order to create a strong and dynamic school culture, a prudent leader should be aware that each individual case requires a different approach. Therefore, school administrators should use appropriate and useful leadership styles that can respond to the requirements of the situations encountered (Walters, 1992). The leadership competencies of school administrators directly affect the quality of education in the school (Cemaloğlu, 2007). Their power base preferences also shape what leadership style they successfully implement. For this reason, identifying leadership styles and power bases of school administrators are an important criterion for evaluating and improving their effectiveness in the management process.

The conducted studies in the literature often handle identifying leadership styles or power bases separately by the view of school principals or teachers. However, the characteristics of leadership extends a large range. Each of the leadership styles has some crucial features in order to reach succeed leadership. The more leadership styles are accomplishedly exhibited, the more effective the school administrator will be. In this study, leadership styles in general and power bases were investigated together and considered from the perspective of pre-service science teachers. Thus, it is determined how effectively school administrators implement leadership features and how power bases related with their leadership preferences. Differently, the styles of leadership exhibited by school administrators and the power bases they apply were evaluated by considering field-oriented attitudes and focused on science education for this.

It should be considered the concepts of school administrator, leader, leadership, instructional leadership and power bases. If examining the related terminology, it provides a better understanding of the research. School administrator is the person who is obliged to bring the school to its goals are consistent with the expectations of the relevant laws, education policies and modern education understanding (Özdemir, 2018). Leader is the person who influences individuals to achieve the goals (Bateman & Snell, 2004). Leadership is defined as influencing, motivating and giving opportunities to individuals to contribute to the effectiveness and success of their organization (McShane & VonGlinow, 2005). Instructional leadership is described as teaching at school and focuses on learning-teaching processes (İlter, 2018). Power bases indicate what resources a person uses to influence others (Şimşek, 2005). There is a strong relationship between leadership and power resource because the power refers to the leader's ability to influence organizational actions and decisions.

### Theoretical Framework

Leadership styles and power bases in education construct the theoretical framework of the study to figure out how primary school administrators perform their administrative abilities. Styles of the leadership were formed based on the leadership styles lists of Sezgin (2012) and Gedikoğlu (2015). A new simplified list was generated depending on both lists (see Figure 1). The leadership styles that had similar meanings were gathered under a topic. Accordingly, seven styles of leadership the school administrators could be exhibit were defined. These are; moral leadership, instructional leadership, charismatic (visionary) leadership, transformational (transactional) leadership, authentic (spiritual, creative) leadership, shared (distributed) leadership, servant leadership. The definition of each style of leadership is given below.

**Moral Leadership:** Moral leader considers ethical behaviors of the employees. Therefore; moral school administrator should exhibit ethical behaviors and be a role model in order to create a school culture (Sezgin, 2012). For instance, it is not an ethical behavior for a school principal expecting teachers to come to school on time and reside in the school only a few hours.

**Instructional Leadership:** Instructional leader aims to increase academic achievement of the students and provide effectiveness in their learning process (Şişman, 2002). Accordingly, the school administrator has four instructional leadership roles. These are; resource provider, instructional resource, communication provider, and visibility at the school.

*Resource provider:* The school administrator organizes the school staff and resources to achieve the mission and goals of the school. The most important resource of the school is the human, the teacher.

*Instructional resource:* The school administrator assists teachers in their professional development. Thus, teachers are encouraged to apply new and different teaching and learning methods to increase student achievement.

*Communication provider:* A school administrator should purpose to provide effective communication with all communities. It is necessary to be an expert in effective listening, understanding in-group relations, and empathy by the school administrator.

*Visibility at the school:* The school administrator participates in the daily activities of the school as an effective instructional leader and exhibits behaviors consistent with vision of the school (Sezgin, 2012).

**Charismatic (Visionary) Leadership:** Charismatic leaders gain faith, trust, acceptance, emotional commitment, admiration and high performance in their followers (Sezgin, 2012). Characteristics of charismatic leadership include vision, effective communication, building trust, helping people feel sufficient, being energetic, action oriented, and inspirator (DuBrin, 2006).

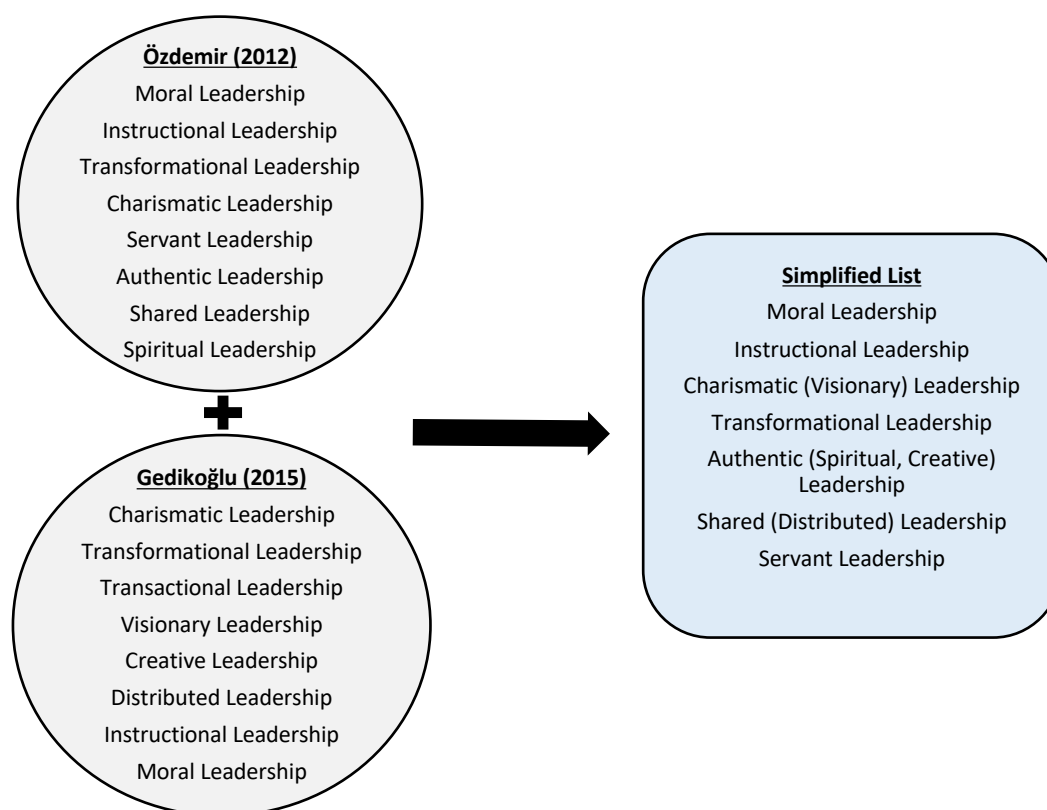
**Transformational Leadership:** Burns (1978) and Bass (1990) claim transformational leaders, as a potential motivator, enhance needs and interests of their employees and also consider the aim and mission of the working community. According to Bass (1990) and Griffith (2004), transformational leaders reach this purpose through three ways. These are; charisma, individualized consideration, and intellectual stimulation. Transformational leadership is able to be seen as a leadership style that directs the rapid change process in the social structure and contributes to the change (Çelik, 1998).

**Authentic (Spiritual, Creative) Leadership:** Authentic leadership is a visionary, creative, flexible and optimistic form of leadership (Leithwood and Montgomery, 1986). The main behaviors of the authentic leader are transparency, self-sacrifice and consistency (Michie and Goothy, 2005).

**Shared (Distributed) Leadership:** Shared leadership results from distributing the responsibility among the interdependent employees and relating them with social interaction (Printy & Marks, 2006). Therefore, shared leaders maximize all human resource capacity in an organization by empowering people and giving them the opportunity to lead in their professions (Özmuşul, 2018). In other words, shared leadership is expressed as mutual interaction in which members are involved in the management process (Pearce and Manz, 2005). As a result, successful shared leadership provides improving shared understanding and more effective action in the community.

**Servant Leadership:** Servant leaders transform their colleagues and organizations and built growing communities (Crippen, 2010; Crippen, 2012; Spears, 2004; Sultan & van de Bunt-Kokhuis, 2014). Therefore, servant leader communicates well with employees and tries to be instructive by encouraging them (Sezgin, 2002).

Transactional leadership is a style of leadership when employees comply with the leader's demands in return for praise, rewards, or avoidance of disciplinary action (Burns, 1978; Gedik, 2020). The basic principle of transactional leadership is exchanging one thing to desired thing for employee (Stewart, 2006). In this study, transactional leadership is associated with power bases because the power of authority includes legitimate, coercive, and reward power bases. These power bases involved in the stated characteristics of transactional leadership. Transactional leadership is not considered as a leadership style.



**Figure 1. The list of leadership styles in education**

Administrators in organizations have power bases arising from their positions and personal characteristics (Karaman, 1999). According to the categorization of French and Raven (1959), the power bases were entitled under two main topics as the power of authority and the power of personality (see Table 1).

The power of authority results from position or status of the administrators and it is given to them by superiors (Sezgin, 2002). This power base includes legitimate power, coercive power, and reward power.

**Legitimate Power:** This power is called official authority. Legitimate power is given to the administrator by appointment and employees are expected to comply with it (Hitt, Black & Porver, 2005).

**Coercive Power:** This power based on the extent to which an administrator deprives employees of the rewards desired by them or uses punishment to control employees (Schermerhorn, Hunt & Osborn, 2000). The effect of this power is based on the habits of the administrator and includes compliance through fear and punishment (Sezgin, 2002). Punishment could be applied as pay cuts, demoting, stopping get a promotion, or dismissal (Hellriegel, Jackson & Slocum, 2002).

**Reward Power:** This power is based on the ability to give rewards by the administrator (French & Raven, 1959). For instance, giving salary bonus, getting promotion or praising employee verbally/giving plaque etc.

The power of personality result from the individual character of the administrator (Hitt, Black & Porver, 2005). This power base includes charisma power and expert power.

**Charisma Power:** Charisma power leads to the attitude regarding referent power (Kudisch et al., 1995; Koşar, 2012). For this reason, unlike the French and Raven (1959) categorization, charisma power is included instead of referent power. An administrator with charisma has a stance that exhibits comfort, self-confidence, an energy and vitality that can affect the employees (Sezgin, 2002).

**Expert Power:** This power is arising from the knowledge, skills and experience of the administrator. When employees believe in the expert power of the administrators, their attitudes and behaviors towards them are more positive and inclined to obey (Sezgin, 2002).

**Table 1. Types of the power bases**

The Power of Authority	The Power of Personality
Legitimate Power	Charisma Power
Coercive Power	Expert Power
Reward Power	

## The Purpose of the Study

The purpose of the study is to determine in which leadership style(s) and power base(s) that school administrators handle the most in primary education based on the perspectives of preservice science teachers. In light of the mentioned literature, the following research questions are addressed:

1. What are the styles of leadership preferred by primary school administrators from the perspective of preservice science teachers?
2. What are the types of power bases preferred by primary school administrators from the perspective of preservice science teachers?

## METHOD

### Research Design

I utilized a qualitative research approach in order to make a detailed and in-depth assessment of a specific situation in this study (Yıldırım & Şimşek, 2011). Individual profiles in different cases should be identified considering mentioned leadership styles and power bases definitions. For this reason, I applied the qualitative research design involving both direct observations and semi-structured interview techniques as primary data collection methods (Marshall & Rossman, 2011). The study specifically focuses on what preservice science teachers determine about leadership styles and power bases of the school administrators. Therefore, observations and interview result predictions of the preservice teachers play an important role when properly organizing and applying the research design.

### Research Design

I determined to use easily accessible sampling, one of the purposeful sampling methods for the sample of the research (Yıldırım & Şimşek, 2011). Therefore, I constituted the participants among 72 senior preservice science teachers from a university where take places Black Sea region of Turkey. I preferred a large sampling in order to reduce inappropriate effects coming from subjective perspective of the observers and tried to provide more than one evaluation for same school administrator. During the study, these preservice teachers observed and interviewed with 18 school administrators, 9 of which are principals and 9 are vice principals, working in 11 different primary schools located in the center of Kastamonu. In the formation of the study group, I considered the

criteria of willingness and volunteering to participate, and being a school administrator in any primary school in the city center of Kastamonu.

### Data Collection Tools

I applied a semi-structured interview form with open-ended questions, which is a frequently preferred data collection form in qualitative research (Creswell & Poth, 2018; Bogdan & Biklen, 2012). I split the interview form two parts taking account of the school administrators. The first part includes open-ended questions to be addressed to school principals, and the second part includes open-ended questions to be addressed to vice principals. I asked the same questions to school principals and vice principals throughout the interview process except for the second and third questions depend on their school administrator positions (see Appendix 1). I took the opinions of three field and education experts from the division of educational administration for the validity and reliability during the preparation process of the interview form. I reached agreement by consensus on the interview questions with the field experts. I applied the form after the necessary arrangements were made in this direction. In addition, the preservice science teachers benefited their individual observations to infer leadership styles and power bases of the school administrators.

### Data Collection Procedure

I carried out the study with preservice science teachers who were enrolled in teaching practice courses in the Fall 2019 and Spring 2020 semesters. Thus, I purposefully constituted these preservice teachers because they had the opportunity to make sufficient observations about the school administrators during the fall and spring semesters in school environment. They were also taking the school management course. In this way, they had the necessary theoretical knowledge about the styles of leadership preferred and the power bases used by school administrators.

Data collection for the study took place fall and spring semesters, totally spread out across 28 weeks. The preservice science teachers were able to find out leadership styles and power base tendencies of the school administrators while they were on duty. They drew on their experiences to identify what leadership styles and power bases had been exhibited by school administrators.

### Data Analysis

The preservice science teachers initially transcribed the interviews. Then, they interpreted leadership styles and power base preferences of the school administrators according to their responses. At this point, I generated the categories depends on the leadership styles and power bases at the part of theoretical framework above. Based on the definition of each leadership styles and power bases, the preservice teachers coded and offered interpretations through qualitative memos regarding the data. They also considered their individual observations about the school administrator when identifying their leadership styles and power bases preferences. Last, the preservice teachers submitted reports regarding their evaluations to the corresponding researcher.

I used pseudonyms for the name of the school and thus name of the school administrators who participated in the study as *Secondary School (State) #1*, *Secondary School (Imam Hatip) #1* and so on to protect their identities. By the way, # of evaluation refers how many preservice teachers evaluated same school administrator when examining the tables. I listed leadership styles and power bases of each school administrator aspect of the view frequencies of the pre service teachers.

## FINDINGS

I separately sought out leadership styles and power bases of the school administrators as school principals and school vice principals for answering the both research questions.

Table 2 shows the leadership styles and power bases distributions of the school principals. With respect to the preservice teacher views, three leadership styles which are moral leadership (6 of 9), instructional leadership (4 of 9), charismatic leadership (3 of 9), spiritual, and authentic leaderships (1 of 9) come into prominence. One other hand, power base preferences of the school principals are favor of legitimate (5 of 9), expert (3 of 9), charisma (2 of 9), and reward (1 of 9) power bases.

**Table 2. Leadership styles and power bases of the school principals**

School	# of evaluation	Leadership Style (f)	Power Base (f)
Secondary School (State) #1	1	Moral (1) Charismatic (1)	Legitimate (1)
Secondary School (State) #2	4	Instructional (3) Moral (3) Spiritual (3) Charismatic (2) Shared (1) Servant (1) Transformational (1)	Expert (4) Reward (3) Legitimate (2) Charisma (1)
Secondary School (State) #3	3	Moral (3)	Expert (2) Reward (2)

School	# of evaluation	Leadership Style (f)	Power Base (f)
		Transformational (2) Shared (2) Authentic (2) Instructional (1) Charismatic (1) Servant (1)	Legitimate (2) Charisma (1)
Secondary School (State) #5	3	Charismatic (3) Instructional (2) Moral (2) Servant (2) Authentic (2) Transformational (1)	Charisma (3) Legitimate (2) Expert (2) Reward (2)
Secondary School (State) #6	8	Instructional (8) Moral (3) Authentic (3) Transformational (3) Charismatic (2) Shared (2) Servant (1)	Expert (7) Coercive (3) Legitimate (3) Reward (2) Charisma (1)
Secondary School (State) #7	1	Moral (1) Instructional (1)	Legitimate (1)
Secondary School (State) #8	5	Charismatic (3) Instructional (2) Transformational (2) Shared (2) Moral (1)	Legitimate (4) Charisma (2) Expert (1) Coercive (1)
Secondary School (Imam Hatip) #1	8	Moral (7) Instructional (5) Transformational (4) Charismatic (3) Servant (2) Shared (1) Authentic (1)	Legitimate: 5 Expert (3) Charisma (2)
Secondary School (Imam Hatip) #2	8	Instructional (3) Moral (3) Authentic (3) Shared (2) Transformational (1) Charismatic (1)	Charisma (6) Legitimate (5) Expert (1) Reward (1)

Table 3 reveals that the school principals cumulatively display instructional and moral leadership styles rather than the other leadership styles when considering nine different schools. This means almost half of the preservice teacher views indicate one of these leadership styles.

**Table 3. Leadership styles distribution of the school principals**

Leadership Style	f (frequency) (n=107)	~% (percentage)
Instructional	25	23,36
Moral	24	22,43
Charismatic	16	14,95
Transformational	14	13,08
Authentic	11	10,28
Shared	10	9,35
Servant	7	6,54

When looking at Table 4, the obtaining data is in favor of legitimate, expert, and charisma power bases as preferences of the school principals. These three power bases reflect majority of the preservice teacher views (near 81%) relevant to power base preferences of the school principals.

**Table 3. Leadership styles distribution of the school principals**

Power Base	f (frequency) (n=75)	~% (percentage)
Legitimate	25	33,33



Power Base	f (frequency) (n=75)	~% (percentage)
Expert	20	26,67
Charisma	16	21,33
Reward	10	13,33
Coercive	4	5,33

According to Table 5, the data suggests that more than the half of the school vice principals (5 of 9) primarily prefer instructional leadership. The school vice principals exhibit the most shared leadership (3 of 9) after instructional leadership. Besides, only one school vice principal more specifically demonstrates moral leadership, but still same level as shared leadership. The preservice teachers highlighted legitimate (5 of 9), reward (4 of 9), expert (3 of 9), coercive (1 of 9), and charisma (1 of 9) power bases as the most used power bases by the school vice principals.

**Table 5. Leadership styles and power bases of the school vice principals**

School	# of evaluation	Leadership Style (f)	Power Base (f)
Secondary School (State) #1	4	Instructional (3) Moral (2) Servant (2) Transformational (1)	Legitimate (4) Reward (4) Charisma (3) Expert (3)
Secondary School (State) #2	6	Instructional (6) Shared (6) Moral (4) Authentic (4) Servant (3) Charismatic (2) Transformational (1)	Expert (6) Legitimate (5) Charisma (1)
Secondary School (State) #4	12	Instructional (8) Moral (7) Shared (5) Authentic (4) Transformational (3) Charismatic (3) Servant (1)	Legitimate (8) Expert (5) Coercive (4) Reward (2) Charisma (2)
Secondary School (State) #6	2	Shared (2) Instructional (1) Moral (1) Transformational (1)	Reward (2) Charisma (1) Coercive (1)
Secondary School (State) #7	1	Shared (1) Transformational (1)	Reward (1)
Secondary School (State) #8	1	Instructional (1) Transformational (1) Charismatic (1) Servant (1) Moral (1)	Legitimate (1) Expert (1) Reward (1) Coercive (1) Charisma (1)
Secondary School (Imam Hatip) #1	1	Shared (1)	Expert (1)
Secondary School (Imam Hatip) #2	2	Moral (2) Shared (2) Instructional (1) Authentic (1)	Legitimate (2) Charisma (1) Expert (1)
Secondary School (Imam Hatip) #3	2	Instructional (2) Servant (1) Charismatic (1)	Legitimate (2) Charisma (1)

Table 6 indicates that the school vice principals cumulatively have instructional, shared and moral leadership styles rather than the other leadership styles. Even, these three leadership styles generate two-thirds of the total leadership styles exhibited. Depends on the preservice science teacher views, instructional leadership (25%) came into forward little more than the other leadership styles.

**Table 6. Leadership styles distribution of the school vice principal**

Leadership Style	f (frequency) (n=88)	~% (percentage)
Instructional	22	25,00
Shared	17	19,32
Moral	17	19,32

Leadership Style	f (frequency) (n=88)	~% (percentage)
Authentic	9	10,23
Transformational	8	9,10
Servant	8	9,10
Charismatic	7	7,95

Considering Table 7, the preservice science teacher views emphasized that legitimate (~34%) and expert (25%) power bases as strongly preferred by the school vice principals. In fact, these two power bases (~59%) constitute more than half of the total power bases used. By the way, the preservice teachers indicated that charisma (~16%) and reward (~16%) power bases are similarly preferred by the school vice principals. They also stated coercive power base (~9%) as at the least used power base.

**Table 7. Power bases distribution of the school vice principal**

Power Base	f (frequency) (n=64)	~% (percentage)
Legitimate	22	34,38
Expert	16	25,00
Charisma	10	15,63
Reward	10	15,63
Coercive	6	9,38

The school principal composite profile was compared with the school vice principal profile as an indicator of similarity and dissimilarity with respect to leadership style and power base distributions. Obtaining data refer that the school vice principals handle shared leadership more than the school principals when separately examined the school administrators. In addition, the school vice principals benefit from reward power base more frequently than the school principals.

Overall, Table 8 and 9 present that leadership style and power base of both school principals and school vice principals, in other words the school administrators, are apparently in favor of instructional leadership (~24%) and legitimate power base (~34%).

**Table 8. Leadership style distribution of the school administrators**

Leadership Style	f (frequency) (n=195)	~% (percentage)
Instructional	47	24,09
Moral	41	21,03
Shared	27	13,85
Charismatic	23	11,80
Transformational	22	11,28
Authentic	20	10,26
Servant	15	7,69

**Table 9. Power base distribution of the school administrators**

Power Base	f (frequency) (n=139)	~% (percentage)
Legitimate	47	33,81
Expert	36	25,89
Charisma	26	18,72
Reward	20	14,39
Coercive	10	7,19

## DISCUSSION

The findings are formed individual observations and interview reports regarding leadership style and power base of the school administrators. I addressed the first research question through the qualitative data gathered from the preservice science teachers what leadership styles the primary school administrators prefer. The preservice science teachers indicate that the school administrators who they evaluate bring instructional leadership (~24%) characteristics into the forefront. Half of the school administrators (4 school principal and 5 school vice principal) prominently reflect this leadership. It is the natural result of the expected academic achievement from school administrators and is supported in the literature. For instance, Reames (2010) emphasizes the main role of instructional leadership features to provide successful educational administration by school administrators.

Moral leadership (~21%) is second-most exhibited leadership style among the school administrators. At this point, the findings infer that the type of school could be as a factor to preferred moral leadership. Half of the school administrators (3 of 6) working in secondary school (Imam Hatip) primarily benefit from moral leadership. Unlike the secondary state schools, the curriculum is



applied based mainly on religion and moral knowledge in Imam Hatip secondary schools. It is possible that the administrators in these schools give more importance to ethical behaviors and try to be a role model. For instance, a preservice science teacher mentions from an Imam Hatip secondary school administrator as a moral leader. The preservice teacher remarks the administrator acts to the foreign students as same as the other students.

Leithwood, Harris and Hopkins (2008) declare seven claims regarding with successful school leadership. One of these claims emphasize that it contributes to the development of the school and positively effect on increasing student achievement when school administrators exhibit shared leadership characteristic. The results of this research also confirmed the same result presenting shared leadership as second-most preferred leadership together with moral leadership after instructional leadership by the school vice principals. In parallel, Bush and Glover (2014) emphasize that the most effective leadership in increasing academic achievement of the school is instructional leadership. They also indicate the application of instructional leadership together with shared leadership can produce much more successful results in school management.

I addressed the second research question relevant to what power bases the primary school administrators prefer. According to the data, power base preferences of the school administrators are in favor of legitimate and expert power. The preservice science teachers stress that the school administrators the most use legitimate power base (~34%) and second-most use expert power base (~26%). Supporting this research, many studies also claim school principals priorly prefer legitimate and expert power bases (Altinkurt and Yılmaz, 2012; Deniz and Çolak, 2008; Meydan and Polat, 2010; Memduhoğlu and Turhan, 2016). The fact that legal power comes to the forefront in the use of authority and authority indicates that school administrators should always have a command of legal texts and legislation in successfully managing education and training for certain purposes. It is an expected school administrators well known legislation related education and significantly apply legal rules in school. As a reflection of this circumstance, the school administrators are able to priority use legitimate power base. The school vice principals generally have legal power and shared leadership characteristics more than the school administrator profile. For the main reason underlying this, it can be said that the vice principal has a management style and field in a hierarchical order dependent on the principal.

Expert power results from the knowledge, skills and experience of the school administrator. For instance, a preservice science teacher who observed the school administrator successfully benefit from expert power defines the application of this power base as a skill to easily figure out whatever conflict or trouble face with in school environment. In addition, the preservice teacher states that to enhance this feature depends on professional experience and self-improvement in the field of school management. Considering the interview report, the preservice teacher indicates that the school administrator has over 25 years teaching and administration experiences and also been several certificates related school management from the different in-service training programs. At this point, many studies linked transformational leadership to expert power (Atwater and Yammarino, 1996; Yahaya et al., 2011). Although the most preferred power base after legal power is expert power, it is seen that school administrators insufficiently exhibit the transformational leadership feature in this research.

The school administrators prefer charisma power (~19%) as third-most used power base. The data shows that school administrators (~21%) benefit from charisma power more than school vice principals (~16%) in educational administration. Bayrak, Altinkurt and Yılmaz (2014) similarly claim that school climate is positively enhanced in case of school principals choose to apply charisma, reward, and expert power bases instead of legitimate and coercive power bases. This situation could be interpreted as school administrators should get the base of the power from their personal characteristics rather than their authority in order to use their power resources effectively.

As indicated above, the preservice science teachers point out the school administrators limitedly demonstration transformational leadership characteristics. Just a few preservice teachers are able to give specific example how school principals benefit from transformational leadership. A transformational leader should have the skills of entrepreneurship and innovation. A pre-service science teacher defined how a school vice principal uses transformational leadership in a specific activity. The school vice principal organized support training room for special education students.

The preservice science teachers also critique leadership preferences of the school administrators that aspect of science education related tasks. They expect that the school administrators act transformational leader considering the declaration of 2023 Education Vision Document. Within the scope of the 2023 Education Vision Document, the Ministry of National Education (MoNE) in Turkey aims to establish Design and Skills Labs (DSLs) in primary and secondary school levels. However, the preservice teachers claim that there is inadequate preparation this educational change process in general by the school administrators. For instance, public school teachers probably have competency-based needs in DSLs (Demirata & Sadik, 2021). The school administrators rarely recognize this need and support teachers with activities. According to the preservice science teachers, some school administrators organize this kind of activities. For instance, a school principal encourages teaching and learning robotic coding in his school. Another school principal leads organization of TÜBİTAK (the Scientific and Technological Research of Turkey) science festivals regularly in his school.

## CONCLUSION AND RECOMMENDATIONS

It is expected that school administrators exhibit leadership features; therefore, they should have almost equal distribution in different styles of leadership. However, it is seen that there is an accumulation in some leadership preferences in light of the

findings. My first suggestion is school administrators should improve their leadership repertoire because each style of leadership has its own advantages and school administrators should have more or less need to practice all of them.

The duty definition of the school vice principals is another issue that we should think over it. Their position of the school vice principal could push them to more focus on educational tasks and share the responsibility with school principal and the other school vice principal. As a natural consequence of this circumstance, the school vice principals (8 of 9) weightily reflect instructional and shared leadership characteristics. This limits the potential of the school vice principals and hinders authentic leadership features of them. My second suggestion draws to redetermine expectations and responsibility from the school vice principals.

At this point, we could merge second and third suggestions under the title of blended leadership. It is argued that how blended education plays an important role in recent education system and the need of blended leadership skills increases. Blended leadership is related with shared (distributed) leadership and administrative management (Jones et al., 2014). Effective application of blended leadership facilitates providing and leading the educational change with participation of each member of the professional team. Both school administrators and also teachers should be informed regarding blended education and leadership with varies events such as in-service training programs.

Last, I would like to underline the need for practice schools in order to enable preservice teachers in the school environment to better comprehension what school administrators apply leadership styles and power bases. The preparation about school management is fundamental for preservice teachers of the present as potential school administrators of the future. Until the last semester, they shouldn't wait for teaching practice course to figure out school management.

### Limitation

The research is limited to school administrators working in Kastamonu city center, who were selected according to the appropriate sampling method in the 2019-2020 academic year. The data obtained in the study are also limited to the observations of the preservice science teachers and the declarations of the school administrators participated in the interviews.

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### Statements of publication ethics

I hereby declare that the study has not unethical issues and that research and publication ethics have been observed carefully.

### Researchers' contribution rate

There is only one author and responsible for all of the research.

### Ethics Committee Approval Information

This research was conducted in accordance with all ethical rules. It has the Ethics Committee Certificate with the Decision of Kastamonu University Social and Human Sciences Publication Ethics Committee dated 12.10.2020 and 3 numbered 3-34.

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