

ASPIRING SCHOOL LEADERS' OPINIONS ON LEADING SCHOOL ORGANIZATIONAL SYSTEMS AND RESOURCE MANAGEMENT IN THE UNITED STATES

AMERİKA BİRLEŞİK DEVLETLERİ'NDEKİ OKUL LİDER ADAYLARININ ÖRGÜTSEL SİSTEM VE KAYNAK YÖNETİMİ ÜZERİNE GÖRÜŞLERİ

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ABSTRACT

This study explores dynamics that affect aspiring school leaders' and their readiness to perform organizational system leadership activities in the United States. The issues of resource management and properly equipping K-12 school leaders with knowledge and skills to ensure the academic success of all students is an on-gong issue. Through effective management of organizational systems the issues begins resolve itself. A quantitative correlational research design was used to analyze how well various factors predict future school leaders' perceived readiness to implement resource and operational management tasks. One of the most staggering outcomes of the study, the future school leaders indicated that they are perform or knowledge ready to manage organizational systems and resources for a safe, high performing learning environment. On the other hand, the significant amount of aspiring school leaders reported that they are not fully confident in their abilities to solve large complex problems to make systemic changes. Results also suggest that when nine predictor variables are included in the regression model, it is noted that only two variables, age and the future leadership plan are significantly correlated with the participants' total organizational system leadership score.

Key Words: Resource Management, Organizational System, Leadership Training

ÖZET

Bu çalışma, Amerika'daki okul lider adaylarının örgütsel sistem liderliği faaliyetlerini yürütmeye ne kadar hazır olduklarını ve hangi farklı etkenlerin liderlik performansını nasıl etkilediği araştırıyor. Okullarda bulunan kaynakların etkili yönetimi ve tüm öğrencilerin akademik başarısını sağlamak için, okul liderlerine organizasyon ve kaynak yönetimi hakkında bilgi ve beceriler kazandırmak günümüzde çok önem taşımaktadır. Organizasyon sistemlerinin etkili yönetimi sayesinde eğitim ve öğretim sorunlarının daha kolay ve hızlı bir şekilde çözüldüğü gözlenmektedir. Bu çalışmada niceliksel korelasyonel araştırma yöntemi, farklı faktörlerin Amerika'da ki okul lider adaylarının kaynak ve operasyonel yönetimi ile ilgili algılamalarını nasıl etkilediğini analiz etmek için kullanılmıştır. Araştırmanın en şaşırtıcı sonuçlarından biri gelecekteki okul liderleri, güvenli ve yüksek performanslı öğrenme ortamı için organizasyonel sistemleri ve kaynakları yönetmeye hazır olduklarını belirttiler. Fakat diğer yandan, Amerika'da okul lider adaylarının önemli bir miktarı, okullarda büyük sistematik değişiklikler yapmaya ve karmaşık örgütsel problemleri çözmeye hazır olmadıklarını ifade ettiler. Sonuçlar aynı zamanda, regresyon modeline dokuz öngörücü değişken dahil edildiğinde, katılımcıların toplam örgütsel sistem liderliği skoruyla yalnızca yaş ve gelecekteki liderlik planları, arasında anlamlı bir korelasyon bulunduğunu göstermektedir.

Anahtar sözcükler: Kaynak Yönetimi, Kurumsal Sistem, Liderlik Eğitimi

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Introduction

The need for strategically aligning organizational systems and resources that support student achievement and school improvement has never been more critically important than today. Public schools face financial challenges with limited resources; at the same time, principals are required to establish systems for fiscal educational and technology resources that operate in support of effective teaching and learning (Jimenez-Castellanos & Martinez, 2016). School leaders should be equipped with the necessary knowledge and skills to successfully manage organizational systems and resources for a safe, high-performing learning environment (Connecticut State Department of Education [CSDE], 2015).

K-12 schools are complex organizations and school leaders are required to work with students, parents, teachers, support staff, community agencies, state and government officials and they are required to show competence in managing organizational systems which includes the Connecticut Leader Evaluation and Support Rubric (2015). Competence in organizational system can be attributed to observable leadership characteristics and can be defined as the ability to effectively manage operations, human resource and the organization's capital and financial resources. Operational management focuses on building staff capacity to make informed decisions regarding the establishment, implementation and monitoring of organizational systems that support student achievement and school improvement (CSDE, 2015).

School leaders are required to act as resource managers who are required to successfully secure and allocate supplies needed to move the vision and the mission of the institution forward (Patterson & Marshall, 2013). Operational management and resource management are addressed separately and collectively in this study in an effort to effectively conceptualize these systems of leadership. One hundred twelve aspiring educational leaders' shared their opinions regarding conducting school organizational and management tasks; their thoughts have been analyzed in terms of related independent variables. Data were collected from a comprehensive leadership readiness questionnaire that was developed by the Connecticut State Department of Education (2015). This study concludes with recommendations to aid in preparing and developing future organizational leaders in their efforts to improve educational outcomes for all students.

Review of the Literature

Operational Management

Operational management should be thought of as building the capacity of the staff to make informed decisions, constructing a comprehensive school site safety and security plan and developing a communication system that delivers data that assures the accurate and timely exchange of information (Armstrong & Taylor 2014). In his work on deepening system leadership, Boylan asserts that leadership in educational organizations is increasingly important and how a school leader manages operations requires analytical thought and an enforcement of power (2013). According to Patterson and Marshall, the process of managing operations should be strategically aligned with systems and resources that support student achievement and school improvement. They explain that operational management should be thought of as a rational system that is evaluated by policies, procedures and other normative structural arrangements that add to the process (2014). In Khanna's work on operations management, he also asserts that the operations function of an organization uses the bulk of the capital, a large part of the manpower, a large part of the fixed assets and a major part of other resources within the organization; therefore, it is imperative that leadership has an operation management plan that is compatible with the business stagey of the organization (2015).

Similar to the Patterson and Marshall's work on operations management, Johnson defines operational management by the way a school is patterned or arranged, which provides the first layer of the

conceptual framework of the organization (1998), while in Marishane's discussion of management of school infrastructure, it is suggested that effective infrastructure management (development of school-based infrastructure management structures, policies, and plans for maintenance and renovations of the school's physical facilities) is important for the success of the organization (2013). Moreover, in The United Nations Children's Fund's (UNICEF) report on quality education for all, it was explained that school infrastructure and how its operations are managed, is an important dimension that contributes to quality education (2002, 2005).

Developing school infrastructure requires effective school leadership, which is directly connected with how the school leader manages the organization's operations. Similarly, Leithwood tells us that school leadership is pivotal in determining successful school improvements and student outcomes (2002). Furthermore, Harris explained that sustained educational reform occurs when leadership is concerned with growing the social and academic capital of students. He also suggested that leadership for school improvement should focus on developing capacity through a system that is dependent on a well-designed operational management plan (2003).

It is important that the school leader has a complete understanding of procedures involved in moving the operational management process forward, how the process is understood will determine if it takes root and becomes an integral part of how the institution functions. According to Karlsson, the scope of operational management is wide and it should be based on a perspective that derives from principles of transformational leadership. He goes on to suggest that when engaging around operational management, one should take a strategic perspective that focuses on the role of the organization and the objective for the overall function of its operations, which includes aspects of how operations influences the day-to-day business of the school organization (2009). In their work on strategic leadership, Davies and Davies (2004) and (Eacott, 2011) shared that school leadership is an executive function that has important intentional implications on educational outcomes. They go on to explain that the articulation and execution of how operations are managed, is what determines the school strategy that directly satisfies the educational agenda, as it relates to the success of the organization. More importantly, Davies and Davies suggest that operational management and how it is carried out is what will define the school's identity and educational outcomes for students (2004).

How operations are managed can have a direct effect on the performance and the capacity building of the school and school leaders are under pressure to run effective, organized schools (Torres, Zellner, & Erlandson, 2008). According to Weick (2012), when thinking of establishing a tightly coupled organization, the leader should know exactly what employees are doing and then have the ability to coordinate activities through a central strategy that is connected with orderly system of operational management. Higgins, Hall, Wall, Woolner & McCaughey (2005) and Earthman (2004) emphasize that research-based evidence supports a positive link between learning outcomes and the physical environment in which teaching and learning takes place. Consequently, it is increasingly clear that in addition to serving as instructional leaders, 21st century school leaders are also required to act as organizational builders and operational managers to create a positive school environment (Stoll, Bolam, and Collarbone, 2002). How school communities operate and how school leadership continues to emerge as a field of social and educational inquiry sets the stage for how we might think about leadership and the role a school leader plays towards engaging as an operational manager. Besides operational management related tasks, school leaders are expected to act as resource managers to successfully secure and allocate resources to support the vision, the mission and goals of the school.

Resource Management

The impact of resource management and its policies and practices on organization performance is an important topic in the fields of educational leadership. How resources are managed can have a direct effect on employee and student performance. Bowen and Ostroff, explained that how resources are managed within the organization sends signals to employees that allow them to understand the desired

and appropriate responses expected in the workplace. How school leaders chart out a path for future growth is essentially dependent of how they manage resources (2004). Resource management is a system for fiscal, educational and technology resources that operate in support of teaching, learning and supporting the growth of the institution (Storey, 2015), which also includes budgeting and securing resources that sustains the vision, mission and goals of the organization and determines how resources are allocated.

As far back as 1995, Huselid argued that an organization's current and potential management of resources is an important consideration in the development and execution of the strategic plan. Ijov, Hemen, Austin and Akinyemi explain that school administrator performs very important roles in the enhancement of teaching and student learning. They go on to explain that it is the school leader who acquires and manages resources, support staff and students and manages equipment and the physical facilities (2016), how a school leader manages resources has a direct effect on the success of the institution.

Armstrong explained that the task of resource management is to align the formal structure and human resources system so that they drive the strategic objectives of the organizations (2014). While Storey shared that the function of resource management should be recognized as a central business concern. He emphasizes that the performance and delivery of resources must be integrated into the organizational structure; which allows the organizational aim to shift from merely securing compliance, to winning commitment across departments (2015).

In his work on total quality management in education, Salih shared that the increasing demand for quality education implies that educational institutions are facing similar pressures that the business sector has been facing for decades. He went on explaining that the main goal of the school organization should be geared towards maximizing resource to make certain educational quality is recognized by parents, students and society, so as to build a strong future for the institution (2008); which is directly related to how resources are managed. Moreover, Beardwell and Thompson emphasized that how resources are managed and distributed within an organization can have a direct effect on climate, culture, and a student's ability to perform. They emphasize, that how resources are managed can generate innovation and creativity, which can make a significant difference between failure and success of the school organization (2014).

When all things are taken into consideration, resource management is increasingly important for how schools' leaders might envision growth for the organization and student performance. John Wacker explains that resource management is based on assessment, accountability and how internal processes of the school are aligned with external pressure and transformed into communication and interaction between school professionals to create positive outcomes for students (1998). According to Becker, Huselid, Pickus, and Spratt, 1997; Lepak et al., 2006, when resources are managed in accordance with goals and values of the organization's objectives it has a direct corresponding effect on creativity and productivity of students and employees. While Uysal suggests that resource management has a direct effect on the development of succession planning, promotion planning and the career planning and placement for employees (2015).

In Middlewood and Abbott's work on managing staff for improved success, they explain that schools are expected to act in a more business-like way and compete with other schools for students, which connects the management or resources to student recruitment and student success (2017). It is imperative that school leaders have an understanding of why resource management is essential for organizational success; more importantly, they should understand the impact it can have on organizational development and student performance. In other words, operational management and resource management strategies are considered significant factors for effective, teaching, learning, school improvement and student achievement.

Factors that Impact Educational Leaders' Performance

In their work on examining the leadership competencies of school principals in Turkey and the United States, Babaoglan and Litchka (2010) indicated that gender is statistically significantly factor on performing leadership activities. For instance, Babaoglan and Litchka reported that female principals in the United States had significantly higher self-ratings than male principals related to inspiring shared vision (2010). Related to leadership development, gender is an important factor that needs to be considered. However, besides gender factor, there are other related independent factors that have potential to impact school leaders' performance. For example, in addition to internal factors such as age, race, personal qualities, traits and individual characteristics, the external factors including school level and school size, years of teaching experience and previous leadership roles can also impact the school leaders' performance (Krüger, Witziers, & Slegers, 2007; Nash, & Bangert, 2014; Northouse, 2009).

Furthermore, it is also important to note that the quality of school leadership preparation programs have also crucial influence of preparing and developing effective school leaders (Fuller, Hollingworth, & An, 2016; Pannell, Peltier-Glaze, Haynes, Davis, & Skelton, 2015). Even though, principal preparation programs focus on training principals to be effective school leaders to meet the complex needs of diverse student populations, Hale and Moorman indicate that a significant number of education leadership preparation programs are failing to meet the comprehensive needs for today's public school leaders (2003). In response to the challenge of preparing effective school leader, this quantitative research study is designed to explore the factors to prepare aspiring school leaders to assume roles as effective organizational leader. Particularly, this study is significant, because there are still inadequate number of research to explore how various factors such as years of teaching experience, age, race, previous leadership experience, school level and school size predict perceived readiness to perform organizational system leadership activities.

Purpose of the Study

Given the importance of the efforts in preparing leaders for the 21st century schools, the purpose of the study is to understand leadership practices in an effort to better prepare future school leaders as resource and operational managers. This study will provide new information by exploring the specific predictors that relate to a school leader candidates' readiness to manage organizational systems and resources for a safe, high-performing learning environment. More importantly, the study investigates how well gender, years of teaching, age, race and previous leadership experience, future leadership plan, school setting along with school level and school size predict leadership readiness. In addition, the study examines the perceived readiness level of future school leaders and their ability to perform necessary operational and resource management task that support the life of the organization. Research questions that guide this study are as follows:

1. What are the self-reported low and high scored leadership activities that focus on managing organizational systems and resources to ensure student success?
2. Is there a relationship between selected organizational system leadership activities? If there is a relationship, what is the direction and significance of this relationship?
3. How well do participants' gender, years of teaching experience, age, race, previous leadership experience, future leadership plan, school setting, school level and school size predict perceived readiness to perform organizational system leadership activities?

Method

Research setting

In this study, data was collected from pre-service school leaders who successfully completed course work in an educational leadership certification program in the state of Connecticut. The two-year leadership certification program consisted of the following courses: Leadership Perspectives, Leadership

Development, Learning Theory, Curriculum Development, Organizational Development and Supervision and Staff Development (18 credits in all). In addition to the six courses, each candidate was required to complete a two-part, field-based 200-hour internship that focused on theory and provided a more realistic understanding of leadership practices.

A faculty member and a certified site mentor provided hands on guidance and direction throughout the process. In addition to working closely with the faculty member and the mentor, participants completed learning goals and submitted weekly reflections on various field experience activities. Participants selected to participate in the study successfully completed the coursework and both sections for the fieldwork of the leadership preparation program. After completing program requirements, participants were required to pass the Connecticut Administrator Test (CAT) and meet technology and special education requirements. Once these obligations were met, participants were awarded a certificate that made them eligible to serve as assistant superintendent, building principal, assistant principal and coordinator of programs in a public school system.

Participants

Participants were comprised of 112 educational leader candidates who had successfully completed coursework in the educational leadership program. Table 1 provides demographic information on the participants.

Table 1
Participants' Demographic Information.

Categories	Frequency (N)	Percent (%)
Gender		
Female	78	69.6
Male	34	30.4
School level		
Elementary School	45	40.2
Middle-High School	67	59.8
Race		
White	98	87.5
Hispanic or African American	14	12.5
Age		
Lowest age-38	68	60.8
39-61	44	39.1
Teaching experience		
1 - 9 Year Teaching Experience	36	32.1
10 - 30 Year Teaching Experience	76	67.9
School Setting		
Urban School	52	46.4
Suburban School	60	53.6

Instrumentation and data collection

The study used a correlational research design to analyze the pre-service school leaders' responses regarding organizational system leadership readiness to determine readiness levels, and yield information regarding competencies future school leader candidates would need to manage organizational systems and resources for a safe, high-performing learning environment. In alignment with the new Connecticut Leader Evaluation and Support Rubric (2015) developed by the Connecticut Department of Education, a comprehensive leadership readiness self-assessment was designed to help educational leader

candidates explore perceived readiness for performing organizational system leadership activities. The survey included demographic information from participants who participated in the study.

Ten items were developed to explore the pre-school leaders' readiness in an effort to determine if they could strategically align organizational systems and resources to support student achievement and school improvement. In addition to high content validity that focuses on organizational system leadership, the high Cronbach alpha value and .95 per all ten items indicated a reliable and stable factor structure that could be used in future research studies.

Table 2
Organizational System Items in the Questionnaire

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1. Establish, implement and monitor organizational systems consistently support the vision, mission and goals
 2. Design and implement a comprehensive school site safety and security plan
 3. Address and resolve any identified safety issues and concerns in a timely manner.
 4. Engage all stakeholders to make or inform decisions regarding continuously improving the data, information and communication systems
 5. Collaboratively develop capacity of staff to document and access student learning progress over time
 6. Develop, implement and monitor a budget aligned to the school and district improvement plans and district, state and federal regulations.
 7. Engage all stakeholders in the creation and monitoring of budget, which is transparent and fiscally responsible.
 8. Maximize shared resources to address the gaps between the current outcomes and goals toward continuous improvement.
 9. Engage students, staff and community in allocating resources to foster and sustain educational equity for diverse student, family and staff needs.
 10. Search state and national grant opportunities and successfully complete grant proposals
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An online survey system was utilized to collect data. Each item listed in the survey described an activity or behavior an instructional leader might perform to improve a school's organizational system. Moreover, each item was measured on a 4-point rating scale. This scale was adapted from Diffley's Four Levels of Readiness Framework (2006). A representation of the preparedness ratings is presented below:

"1" represented: *Not Ready at All*

The candidate has no awareness and knowledge regarding performing the necessary leadership practice.

"2" represented: *Awareness and Knowledge-Ready*

The candidate can acquire concepts, information, definitions, and procedures. Candidate can also interpret and integrate the leadership practice, but have little or no readiness to apply knowledge or measure its impacts without coaching or guidance.

"3" Represented: *Performance Ready*

Candidate can apply knowledge and skills, but the candidate is not ready to create innovative solutions and/or evaluate the impacts of leadership practices.

"4" Represented: *Impact and Accountable Ready*

Candidate has the ability to apply knowledge and skills to solve large complex problems and make systemic changes, which includes innovative solutions and the associated impact.

Variables and Coding

This section provides the readers with information on dependent and independent variables along with the coding system for each variable. Nine independent variables were used to explore if there were

relationships between the variables and measured outcomes. The nine independent variables are as follows:

1. School setting (urban, suburban),
2. Gender (female, male),
3. School level (elementary, middle and high school),
4. School size (small, medium, large),
5. Race (Hispanic, African American, White, and others),
6. Teaching experience (novice, experienced),
7. Leadership experience (yes, no),
8. Future leadership plan (yes, no) and
9. Age.

Dependent variables were aligned with the research question and obtained from the survey results on the pre-service school leaders' perceived readiness for managing organizational systems and resources for a safe, high-performing learning environment.

The objective was to determine if the nine independent variable causes change in the dependent variables. Scores obtained from 10 items measured on a 4-point rating scale helped to indicate the level of preparedness. Each item was measured on a 4-point rating scale; the highest dependent variable score that could be obtained from the survey is 40.00, the lowest score that could be obtained was a 10. The organizational system leadership were measured based on the total of 10 1-to-4 rating items (where a higher scores meant high organizational leadership). The coding of independent and dependent variables are shown in table 3.

Table 3
Coding of Independent and Dependent Variables

Factors	Variable Type	Categories	Coding
School Setting	Independent	Urban	1
		Suburban	2
School Level	Independent	Elementary	1
		Middle and High	2
School size	Independent	Small	1
		Large	2
		White	1
Race	Independent	African American and Hispanic	2
Age	Independent	Lowest to 38	1
		39 - 61	2
Gender	Independent	Male	2
		Female	1
Teaching Experience	Independent	Novice	1
		Experienced	2
Leadership Experience	Independent	No	0
		Yes	1
Future Leadership Plan	Independent	No	0
		Yes	1

Results

This section addresses each research question in detail.

Research question "1"

What are the self-reported low and high scored leadership activities that focus on managing organizational systems and resources to ensure student success?

Descriptive statistics were utilized to better understand the self-reported low and high scored organizational system leadership activities that focus on ensuring school improvement. As shown in Table 4, the descriptive statistics revealed three major points.

The statistics indicated that almost fifty percent of the pre-service school leaders who completed the course-work were neither “perform ready” or “impact ready” related to conduction organizational system leadership activities 5, 6, 7, 8, 9 and 10. Half of the candidates indicated that they did not believe they had the confidence to apply the needed “knowledge” or “skills” to manage organizational systems and resources for a high-performing learning environment. One of the most staggering outcomes from the comprehensive instructional leadership readiness assessment was that approximately 20% of the future school leaders reported that they were “impact” and “accountable ready” to solve large complex problems as school administrators; however, approximately 80% of the participants were not “impact ready,” which indicates that the majority of the candidates are not confident in their abilities to solve large complex problems to make systemic changes.

Table 4, also indicates that item 6 “Develop, implement and monitor a budget aligned to the school and district improvement plans and district, state and federal regulations,” and item 10 “Search state and national grant opportunities and successfully complete grant proposals” had the lowest mean score of 2.67 out of 4.00. The common features of these two items are school finance and budget.

Different from item 6 and item 10, future school leaders indicated that they felt more competent and “ready to implement,” item 4 “Engage all stakeholders to make or inform decisions regarding continuously improving the data, information and communication systems” ($M = 3.06$, $SD = .90$) and item 5 “Collaboratively develop capacity of staff to document and access student learning progress over time” ($M = 3.04$, $SD = .89$) (Empirical evidence for these implications are provided in the inferential statistics sections).

Table 4:

Descriptive Statistics Organizational System Leadership Items (N=112)

Organizational System Statements	Not Ready	Knowledge Ready	Perform Ready	Impact Ready	Mean Total	SD Total
1. Establish, implement and monitor organizational systems consistently support the vision, mission and goals	1%	29%	37%	33%	3.02	.87
2. Design and implement a comprehensive school site safety and security plan	4%	33%	34%	29%	2.87	.87
3. Address and resolve any identified safety issues and concerns in a timely manner.	4%	30%	35%	31%	2.95	.90
4. Engage all stakeholders to make or inform decisions regarding continuously improving the data, information and communication systems	4%	27%	29%	40%	3.06	.90
5. Collaboratively develop capacity of staff to document and access student learning progress over time	4%	26%	31%	38%	3.04	.88
6. Develop, implement and monitor a budget aligned to the school and district improvement plans and district, state and federal regulations.	5%	43%	34%	19%	2.67	.89
7. Engage all stakeholders in the creation and monitoring of budget, which is transparent and fiscally responsible.	4%	44%	32%	20%	2.70	.88
8. Maximize shared resources to address the gaps between the current outcomes and goals toward continuous improvement.	4%	39%	37%	21%	2.77	.87
9. Engage students, staff and community in allocating resources to foster and sustain educational equity for	3%	40%	37%	21%	2.81	.88

diverse student, family and staff needs.

10. Search state and national grant opportunities and successfully complete grant proposals	6%	44%	29%	21%	2.67	.89
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Research question “2”

Is there a relationship between ten organizational system leadership activities? If there is a relationship, what is the direction and significance of this relationship?

The correlation matrix was examined to check for a possible relationship between ten organizational system leadership activities. The direction and significance of the relationship was also calculated. The intercorrelations among all items are presented in Table 5.

Table 5.

Intercorrelations for Items of the Organizational System Leadership Scale.

Items	1	2	3	4	5	6	7	8	9	10
1	1									
2	.75**	1								
3	.80**	.90**	1							
4	.77**	.82**	.89**	1						
5	.79**	.85**	.89**	.94**	1					
6	.57**	.49**	.50**	.47**	.49**	1				
7	.63**	.54**	.56**	.59**	.58**	.88**	1			
8	.70**	.60**	.67**	.66**	.62**	.71**	.77**	1		
9	.60**	.57**	.63**	.63**	.61**	.59**	.76**	.80**	1	
10	.62**	.55**	.56**	.56**	.53**	.59**	.76**	.70**	.56**	1

**Correlation is significant at the 0.001 level (2-tailed)

The intercorrelations for ten items of the organizational system leadership scale are demonstrated in Table 5. The correlated items have a correlation value between .49 and .94. Particularly, all ten variables are significantly related to each other at the 0.001 level (2-tailed). All intercorrelations for the ten items are in a positive direction. Which means when one variable decreases, the other variables decreases, or when one variable increases while the other increases. It is noted that correlations above .90 between items can be a threat for the reliability of the scale (see, Tabachnik & Fidell, 2007). In this study, the intercorrelations among ten items are used for descriptive purposes not link a cause-effect relationship.

Research question “3”

How well do participants’ gender, years of teaching experience, age, race, previous leadership experience, school level and school size predict perceived readiness to perform organizational system leadership activities?

In order to investigate how well participants' gender, years of teaching experience, age, race, previous leadership experience, school level and school size predict perceived readiness to perform organizational system leadership activities, the researchers used the multiple linear regression model that involves multiple explanatory variables. The dependent variable was the total organizational leadership scores of all ten items (Minimum score= 10 and Maximum score= 40). In order to meet the multiple linear regression model requirements, as indicated in Table 3, all independent factors are coded as a nominal scale with two variables. Moreover, the total organizational leadership score is used as the dependent variable with interval scale. The purpose of this analysis was to assess which of the nine scales explained the greatest amount of variance in the participants' total organizational system leadership score. The multiple linear regression model, including all nine predictors, was statistically significant, $F(9, 102) = 2.318$, $p < .05$ with $R^2 = .17$. The total organizational system leadership score could be predicted rather well from this set of nine variables, with approximately 17% of the variance in the total organizational system leadership score accounted for by the regression.

Regarding the contribution of each predictor to the equation one by one, it can be said that Age variable explained 7% of the variance, and it had a high relationship with the outcome variable. The future leadership plan explained only 4% of the variance. When all predictor variables are included in the model it is noted that only two variables, age and the future leadership plan are significantly correlated with the participants' total organizational system leadership score.

Table 6

Regression Analysis Summary for Variables Predicting Readiness for Organizational System Leadership

Variables	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>T</i>	<i>Sr²</i>
School Setting	-.499	1.297	-.035	-.385	.001
Gender	-.636	1.494	-.041	-.426	.001
School Level	2.456	1.748	.169	1.405	.020
School Size	-.680	2.036	-.041	-.334	.001
Race	-3.125	1.993	-.145	-1.568	.020
Teaching Experience	-.940	1.567	-.062	-.600	.001
Leadership Experience	.197	1.444	.014	.137	.001
Future Leadership Plan	3.405	1.495	.214	2.278*	.040
Age	4.488	1.542	.308	2.911*	.070

Note. $R = .17$ ($N = 112$, $*p < .05$)

Discussion: Implication for Policy and Future Practices

Results of the evaluation are analyzed to make recommendations for preparation programs, so that school leaders are better prepared to implement systemic improvement strategies that yield effective, meaningful results. Since each university's school principal preparation program varies in terms of policy implementation and organizational structure, the following suggestions provide a comprehensive starting point for future discussions and possible areas where improvements might be needed.

Shifting from preparing knowledge ready leaders to perform ready leaders

Results of the study indicated that almost fifty percent of the pre-service school leaders who successfully completed the educational leadership program saw themselves as "knowledge ready," but not "performance ready," which implies that half of the candidates did not feel confident in their ability to

apply the needed skills and knowledge to manage organizational systems and resources for a high-performing learning environment. Practical, direct learning must be included as part of the educational process if future school leaders are to walk away from leadership programs with a comprehensive understanding of how to perform as effective leaders. Instead of programs that demand candidates memorize organizational theories and instructional practices that, in effect, do not prepare them to take on responsibilities as confident school leader, programs should be designed with practical, real-life assignments that holistically prepare candidates to engage as competent school leaders who have the knowledge and the skills to manage organizational system that improve the structure of the organization and student outcomes.

Instead of memorizing organizational structural frameworks such as Mintzberg's five organizational structures, Weber's model of bureaucracy, Scott's open-systems perspective and Likert's system for organization leadership, programs should engage candidates in project-based learning and assessment activities specifically tailored to transform students from "knowledge ready" to "performance ready" candidates, who are confident in their abilities to take on leadership responsibilities. This includes tasks designed to provide organizational context for active learning. With this, students will be required to utilize multiple organizational structural frameworks that eventually empower them to address and resolve identified safety issues in a timely fashion. More importantly, course projects should document and access student learning progress over time and continually seeks to develop an improved understanding of data systems. In all, candidates should learn by taking part in activities that test their ability and their skills to perform effectively in a leadership role. Leadership programs should be thought of as programs that assign instructional practices and assessments that lead to deliberate, well-structured authentic exercise that comprehensively involve students (Barnett, 2004).

Impact and Accountable Ready Leadership

In terms of performing organizational system leadership tasks, only 20% of future school leaders reported that they were adequately prepared to solve large complex problems in schools. While 80% of the respondents *did not* feel confident that they were prepared to solve large complex problems or make systemic changes, which include innovative solutions and addressing impacts that follows. To build the capacity of pre-service school leader candidates every candidate should be required to actively participate in preparation, implementation and evaluation of an improvement plan whether it is a school or a district-wide plan.

Across the United States school districts confront a variety of demographic shifts (linguistic, economic, and racial) that reshape local identities, enrollments, resources, and educational work. Therefore, in order to prepare influential school ready leader candidates, they should be required to perform duties that build capacity and lead to the development of successful policies and practices that respond to demographic changes. Candidate should be required to provide evidence of proficiency to develop equitable reforms that address cultural and political changes. Candidates should not be bogged down with misdirected exams and project that do not cover realistic issues; instead, they should be required to create final leadership projects and capstone assignments that address realistic, everyday situations that speak to issues school leaders will eventually face over a period of time. Candidates should be required to present innovative training models that can eventually be presented at professional development and evaluation committee meetings.

Improving School Leader Candidates' Competencies in School Finance and Budgeting

While participants indicated an understanding of collaboratively develop capacity of staff to document and access student learning progress overtime (mean score 3.04), they indicated that they were less likely to develop, implement or monitor a budget aligned to the school and district improvement plans along with state and federal regulations (mean score 2.67). Efforts should focus on improving each candidates' capacity for dealing with school finance and budgeting issues which is significantly important when we think about school leadership.

There are a number of ways in which school leaders can learn and practice current school finance issues. A simple and current way to improve school leader candidates' competencies is through mentoring and coaching. As a part of the internship requirements, every intern should be required to actively take part in a budget meeting with a specific purpose of learning, developing, implementing and monitoring a budget that is aligned with the school and the district's improvement plan. In addition, each candidate should be required to develop knowledge and skills to comprehensively utilize budget reduction planning and strategies.

Developing Comprehensive Approach for Building Organizational Systems Skills

It was surprising to see that the ten organizational system variables were significantly and positively related to each other at the 0.001 level (2-tailed). With this understanding, school leadership preparation programs should be required to develop a comprehensive and cohesive approach towards building the capacity of future school leaders, so they have the ability to ensure the academic achievement of all students. This includes successfully managing organizational systems and resources that are aligned with the Connecticut Leader Evaluation and Support Rubric (2015). Figure 1 shows a sample school leadership preparation program curriculum model.

Sample Educational Leadership Program Course Names	WHAT TO ASSESS Key Areas of Organizational System Leadership	HOW TO ASSESS IT Potential Sources of Evidence for Organizational System Leadership Practices
<ul style="list-style-type: none"> • Leadership Perspectives • Leadership Development • Learning Theory • Curriculum Development • Organizational Development • Supervision and Staff Development • Educational Law • Educational Finance • Field-based Internship • Seminar in Educational Leadership 	<ul style="list-style-type: none"> • School Finance • Resource Management • Organizational Framework • Communication System • Inclusive Decision Making • Relationship Building • Cultural Competencies • Community Diversity • Technology Integration • Data Management 	<ul style="list-style-type: none"> • Development of a school master schedule • Preparation of individual student schedules • Designing of counseling and support teams • Function of school climate committee • Preparation of school organization chart • Structure of leadership teams • Coordination of instructional improvement committees • Coordination of professional development and evaluation committees • Improving the school condition: maintenance of facilities, playgrounds, equipment, etc. • Management of arrival and dismissal times • Coordination of school safety procedures • Managing school data and technology plan • Social media and communication system • Preparation of school improvement plan • Involvement of parent and community Agencies • Function of school governance council • Coordination of school budget process • Grant application process

Figure 1. Sample Educational Leadership Curriculum Model for Teaching Organizational Systems

Figure 1 indicates that School leadership preparation programs should examine course activities and assessment projects in an effort to ensure that candidates have a clear, understanding of leadership roles, organizational system and organizational structures. In particular, content based quizzes and assignments can be used to determine the necessary interventions and differentiated instruction to successfully build capacity to apply organizational knowledge and skills. For instance, School leadership

preparation programs are required to provide opportunity for application, synthesis and analysis of the following key organizational system contents such as school finance, resource management, organizational framework, communication system, inclusive decision making, relationship building, cultural competencies, technology integration, and data management.

Both age and having future leadership plans are linearly associated with a higher probability of performing organizational system activities. According to Pintrich, 2000; Wigfield, & Eccles, 2000, the relationships between self-motivation and high performance are well established. It is not surprising that motivated candidates who have the desire to serve as school leaders are more likely to achieve the expected leadership tasks. Findings suggest that school leadership preparation programs and leader educators should focus on recruiting candidates who are focused and driven towards reaching high standards as a future school leader. Leadership preparation programs should consider the development of an advisory committee composed of leadership faculty and practitioners who can establish effective admission and recruitment strategies that attract candidates who are interested in becoming school leaders who are committed to systematically improving educational outcomes for all students.

Findings also indicated that age is a significant factor when predicting a candidates' readiness to perform organizational system skills. When the age of a candidate increases, the perceived leadership readiness scores also increase. With this knowledge, school leadership preparation programs should devote added attention to improving leadership capacity of candidates who start the educational leadership training at a relatively young age. Since young school leader candidates are less likely to have extensive K-12 teaching and leadership skills, school leadership preparation programs should pay close attention to ensuring that young candidates are building knowledge and skills to engages students, staff and community in allocating resources to foster and sustain educational equity for diverse student, their family and organizational staff.

Conclusion

In an effort to improve academic outcomes of all students, it is crucial to improve both the operational and resource managements of the school organization. When school systems are effectively managed, leadership of school organization is balanced to managing human capital as resources for a safe, high-performing learning environment. As we reflect on the development of these systems, the leadership training institutions must first design programs that ensure that potential school leaders are not only "knowledge ready," but "performance ready" as well. More importantly, leadership training programs should design well-structured, comprehensive exercises that allow future school leaders the opportunity to effectively address large complex school problems with a secure knowledge of building organizational effective systems. In all, school leadership preparation programs must work towards recruiting mature future school leaders who have a desire to perform to high standards. Operational and resource management, should be thought of as building the capacity of the staff to make informed decisions that improve school site safety and security plans that enhance communication and the timely exchange of information.

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