EMPOWERING SCHOOL LEADERS: ADDRESSING THE POST-COVID-19 PROFESSİONAL DEVELOPMENT NEEDS

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Abstract
The COVID-19 pandemic has brought about significant changes in the field of education, impacting various aspects of schooling like never before. This study aims to address the unprecedented effects of the pandemic by delving into the professional development needs of school leaders. Through a quantitative explorative approach, the study seeks to build, test, and enhance our understanding of how school leaders can effectively respond to the challenges posed by the pandemic. The specific focus of this research lies in the post-COVID-19 return phase. The findings of the study highlight the diverse training requirements of school leaders, categorized into four main domains: (1) Instructional Leadership, (2) Talent Management, (3) Organizational Systems, and (4) Culture and Climate. These domains represent crucial areas where school leaders need support and improvement to navigate the changes and uncertainties brought on by the pandemic. The ultimate goal of this article is to contribute significantly to the field of educational leadership. By identifying and addressing school leaders' high and low training needs, this research aims to provide schools with tailored and adaptable training opportunities. Such targeted strategies can be applied in any school setting, ensuring that leaders are well-prepared to tackle the unique challenges posed by COVID-19 and its aftermath. In conclusion, this article offers practical and actionable strategies for developing highly-trained school leaders capable of effectively leading educational institutions through the evolving landscape of COVID-19 and the post-COVID-19 era. The insights gained from this study are valuable resources for schools seeking to thrive amidst the changes and uncertainties caused by the pandemic.
Keywords: Leadership training, pandemic, need assessment, professional development.

OKUL LİDERLERİNİ GÜÇLENDİRMEK: COVİD-19 SONRASI MESLEKİ GELİŞİM İHTİYAÇLARININ KARŞILANMASI

Özet
COVID-19 salgını, eğitim alanında önemli değişikliklere yol açmış ve okullaşmanın çeşitli yönlerini daha önce hiç olmadığı kadar etkilemiştir. Bu çalışma, okul liderlerinin mesleki gelişim ihtiyaçlarını araştırarak pandeminin etkilerini ele almayı amaçlamaktadır. Çalışma, nicel araştırma yöntemi ile, okul liderlerinin pandeminin yarattığı zorluklara nasıl etkili bir şekilde yanıt verebileceklerine dair anlayışımızı geliştirmeyi amaçlamaktadır. Bu araştırmanın özel odak noktası COVID-19 sonrası okula geri dönüş aşamasıdır. Çalışmanın bulguları, okul liderlerinin dört ana alanda kategorize edilen çeşitli eğitim gereksinimlerini vurgulamaktadır: (1) öğretim liderliği, (2) yetenek yönetimi, (3) organizasyonel sistemler ve (4) kültür ve iklim. Bu alanlar, okul liderlerinin pandeminin getirdiği değişiklikler ve belirsizliklerle başa çıkabilmek için desteğe ve iyileştirmeye ihtiyaç duydukları önemli noktaları temsil etmektedir. Bu makalenin nihai amacı, eğitim liderliği alanına önemli ölçüde katkıda bulunmaktır. Bu araştırma, okul liderlerinin yüksek ve düşük eğitim ihtiyaçlarını belirleyip, okullara özel ve uyarlanabilir eğitim fırsatları sunmayı amaçlamaktadır. Bu tür hedefe yönelik stratejiler herhangi bir okul ortamında uygulanabilir ve liderlerin COVID-19 ve sonrasında ortaya çıkan zorlukların üstesinden gelmek için iyi hazırlanmış olmalarını sağlar. Sonuç olarak bu makale, COVID-19'un ve COVID-19 sonrası dönemin değişen ortamında eğitim kurumlarına etkili bir şekilde liderlik edebilecek yüksek eğitimli okul liderleri yetiştirmek için pratik ve uygulanabilir stratejiler sunmaktadır. Bu çalışmadan elde edilen sonuçlar, pandeminin neden olduğu değişiklikler ve belirsizlikler arasında başarılı olmak isteyen okul liderleri için değerli bir kaynak olarak görülebilir.
Anahtar Kelimeler: Liderlik eğitimi, pandemi, ihtiyaç değerlendirmesi, okul lideri mesleki gelişim

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INTRODUCTION

Leadership and School Success

The COVID-19 pandemic has significantly impacted all aspects of K-12 schools, and educational leaders are facing new and complex challenges to provide effective learning environments for all students (Darling-Hammond, and Hyler, 2020). Therefore, it is crucial to address the school administrators' training needs in order to effectively lead schools in the post-pandemic era. School leaders play a very important role in setting the direction for creating successful schools (Leithwood, Harris, & Hopkins, 2020). In other words, effective school leadership is considered as a critical factor to improve educational outcomes for all students (Sebastian, Allensworth, Wiedermann, Hochbein, & Cunningham, 2019). With the emphasis on preparing highly qualified school leaders for the 21st century, previous studies investigated how aspiring and practicing principals can be developed and supported in their efforts to create successful schools.

By equipping school leaders with the necessary skills and knowledge, the schools can have well-prepared administrators to lead their schools in the new educational landscape and effectively support students and staff. Particularly, previous leadership development studies have revealed two major findings. First, there is a positive correlation between high-performing schools with increased student achievement and effective school leadership practices (Gurr, Drysdale, & Mulford, 2006). In other words, children in underperforming schools are unlikely to succeed unless the leadership programs prepare and develop high-quality educational leaders. Second, the roles and responsibilities of school leaders have changed significantly (Pollock, 2020). For instance, in the past, school leaders were considered as building managers, teachers' supervisors or disciplinarians (Lynch, 2012). However, recently, school leaders have been expected to have transformational roles for increasing student success, building a positive school climate and culture, leading an effective organizational system, and serving as instructional leaders (Fullan, & Quinn, 2015).

The previous research studies emphasize the important role of school leaders to sustain school success (Garza, Drysdale, Gurr, Jacobson, & Merchant, 2014). When school leaders are skilled, supported, and trained for effective school leadership strategies, schools are more likely to improve students' achievement (Mathibe, 2007). Essentially, the success of both students and schools depends on the performance of school leaders who now carry important roles as instructional leaders and supervisors in schools (Lynch, 2012). In addition to fostering an environment for achievement, school leaders contribute to achieving the school's vision and missions by supporting teachers and all stakeholders (Mathibe, 2007).

Professional Development of School Principals in the USA

According to the National Center for Education Statistics (2022), the number of public schools in in the USA was 98,577 during the 2020–21. The public schools in the United States employed over 90,000 principals. Based on the national statistics, 68 percent were elementary school principals, 22 percent were secondary school principals, and 9 percent were principals at combined elementary and secondary schools. The number of public school principals in 2017–18 was about 8 percent higher than in 1999–2000 (83,800), while the number of public schools in 2017–18 (98,500) was 7 percent higher than in 1999–2000 (92,000). The percentage of public school principals who were White was lower in 2017–18 than in 1999–2000 (78 vs. 82 percent). In contrast, the percentage who were Hispanic was higher in 2017–18 than in 1999–2000 (9 vs. 5 percent).

In addition to those school leader demographics data, National Center for Education Statistics (2023) reported that each year nearly 11,000 individuals enter a school in the USA as new principals. Moreover, it is reported that most public school principals had a postbaccalaureate degree as their highest degree: 62 percent had a master's degree, 26 percent had an education specialist degree, and 11 percent had a doctor's or first-professional degree. Based on the National Center for Education Statistics (2023) and the National Teacher and Principal Survey data and findings, every year, around 100,000 school leaders need ongoing professional development and training.

The previous studies indicated that professional development and training activities play important roles in improving the capacity of school leaders (Coles, 2003). For instance, as Bush (2003) reported structured professional development activities help school leaders to be more reflective and improve their leadership knowledge and skills. In addition, it is noted that the professional development of school leaders give educational leaders the systemic support they need and the opportunity to expand their leadership skills. Therefore, ongoing PDs are necessary for the growth of leaders in the schooling system. The research shows that providing high-quality training opportunities gives school administrators the necessary skills and competencies for school

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leadership, however, there is limited empirical work that directly explores the needs of school leaders after COVID-19.

Moreover, as Madge (2003) indicated effective professional development and training activities for school leaders should be guided by a coherent long-term plan and supported by evidence-based practices. It is recommended that to improve the school and student success, training activities should be planned and organized primarily based on individual school needs. Kochan, Bredeson, and Riehl, (2002) focused on reshaping the professional development of school leaders. Instead of a one-time PD event, targeted training should be continuous and ongoing. It is also crucial to measure the effectiveness of professional development activities on school improvement and student success. School leaders in the USA utilize various formal and informal training strategies including mentoring, reflection, networking, coaching, and mentoring for their personal and professional development (Mathibe, 2007).

To develop standard-based leadership development programs, professional organizations such as the National Association of Secondary School Principals (NASSP), National Policy Board for Educational Administration (NPBEA), Council for the Accreditation of Educator Preparation (CAEP), and the National Education Association (NEA) provide standards and a set of common expectations for the knowledge, skills, and dispositions of school leaders in an effort to establish a framework of effective teaching and learning. In this study, when the survey questions are developed, these standards and the findings of the previous studies were utilized.

The Impact of COVID-19 Pandemic on Schools and Educational Leadership

COVID-19 changed many aspects of schooling including teaching, learning, assessment and safety issues. The pandemic interrupted the education of millions of students. Particularly, becoming a school leader during COVID-19 is very challenging because there are no precedents and no formal guides to lead schools in a pandemic. As Netolicky (2020) notes: 'In a time of crisis, leaders must act swiftly and with foresight but also with careful consideration of options, consequences and side effects of actions taken'. Since the school leadership practices have changed considerably and maybe, irreversibly, new professional development activities will be required to fully and adequately encompass the leadership skills, practices and, actions suited to the current, and potentially ongoingCOVID-19 situation.

Harris, A. (2020) explored how school leaders are responding during COVID-19 and what forms of leadership practice are emerging. Since the pandemic affected almost all parts of schooling and educational leadership, Harris, A. (2020) proposes that the current crisis has shifted school leadership dramatically towards distributed, collaborative, and network practices. School's mission, managing the instructional program and promoting a positive school-learning culture that leads to student success (Elmore, 2001). Bush and Glover also argue that instructional leadership focuses on teaching and learning and the behavior of teachers in their engagement with students (2003), however, during COVID-19 crisis, millions of young people have been out of school and millions of households had no access to the internet and proper technology to continue their education (Harris, and Jones, 2020).

Since the condition of education changed, and many senior teachers discontinued teaching after COVID-19, it is also important to recruit, manage, assess and develop and maintain the human capital in schools. Recruiting, selecting, supporting, and retaining effective educators is an important part of implementing the school's vision, mission, and goals (The Connecticut Leader Evaluation and Support Rubric, 2017). Like talent management, school leaders are also required to focus on improving organizational systems. Based on The Connecticut Leader Evaluation and Support Rubric (2017) organizational education leaders are required to ensure the success and achievement of all students by managing organizational systems and resources for a safe, high-performing learning environment. Since the COVID changed the schooling, after COVID-19, school leaders also need to focus on operational management system and monitor budget responses to mitigate this impact (Al-Samarrai, Gangwar, Gala, 2020)

Besides, instructional, talent management and organizational issues, school leaders are required to deal with morale, climate and culture related incidents. Herman, Sebastian, Reinke, & Huang (2021) surveyed six hundred and thirty-nine teachers about their stress, coping, health, job satisfaction, and internalizing symptoms before the COVID pandemic, and May 2020, during the pandemic. Teachers also provided ratings during COVID-19 of their teaching, engagement, and concern about students and families. Teachers reported lower levels of work-

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related stress after the pandemic's onset compared to their pre-pandemic levels. Since organizational culture and morale determine how employees function, behave and commit themselves to the mission of the organization (Schneider and Barbara, 2014). It is crucial to create a positive school climate and safe school environment in improving student and school success.

As a result, the current research indicates that during and after COVID, the school leadership faced with disruptive times, and there is still a lack of research on how school leaders are responding to COVID-19. Exploring the most recent training needs of school leaders require sophisticated research methodologies. If school leaders lack awareness and skills regarding the current needs, it will be difficult to lead schools through those changes and challenges that accompany COVID-19 and post-COVID-19. Therefore, with the emphasis on preparing highly qualified school leaders for the 21st century, this study will address the following research questions in detail: What are the self-reported lowest and highest training needs of school leaders?

METHOD

Research Model
The purpose of the quantitative study was to explore the self-reported lowest highest-scored training needs of school leaders in four main domains including (a) instructional leadership, (b) talent management, (c) organizational system, and (d) climate and culture. Particularly, a quantitative explorative study was conducted and focused on gathering and analyzing educators' perceptions of school leaders' training needs regarding these four domains. The researcher focused on gaining an understanding of the urgent needs of school leaders to inform the leadership team. Since the COVID-19 pandemic has had devastating impacts on both teaching and learning. The study design allows school principals and educators to identify the high and low training needs of school administrators to improve students' success. Particularly, school leaders and related educators can apply the results to consider time and budget allocation in planning short and long-term training activities for school leaders. During the planning of leadership training, local context and needs should be taken into consideration.

1- What are the instructional leadership-related lowest and highest training needs of school leaders?
2- What are the talent management-related lowest and highest training needs of school leaders?
3- What are the organizational system-related lowest and highest training needs of school leaders?
4- What are the climate and culture-related lowest and highest training needs of school leaders?

Participants and Research Setting
The data investigated in this study were collected from public school educators. All participants are employed in Connecticut which is a U.S. state in southern New England that has a mix of coastal cities and rural areas dotted with small towns. 83% of participants were employed in urban school settings and 17% of the responders indicated that they serve in sub-urban school settings. Regarding school level, the participants also show diversity which includes 40.3 % Elementary, 21.6 % Middle School, 32.1 % High School and 6% of participants indicated that they serve in the Central Office. As indicated in Table 1 Participants' Demographic Information, the participants (N=144), the study includes diverse groups of participants in terms of gender, school level, race, experience and position.

Table 1. Participants' Demographic Information

Variables	Percent (%)
Gender	
Female	72.2
Male	17.8
School level	
Elementary	40.3 %
Middle	21.6 %
High School	32.1 %
Central	6.0 %

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Race

White	91.2
Other	8.8

Experience (Tenured)

1 – 6 Year Experience (Non-Tenured)	22.8
7 - 30 Year Teaching Experience (Tenured)	67.2

Position

Regular Education Teacher	45.7 %
Special Education Teacher	14.2 %
School Counselors	7.9 %
School Admin	24.4 %

Instrumentation and Data Collection

Consistent with State and International School Leader Licensing Association (ISLLC) standards, the Connecticut Department of Education revised the CT Leadership Assessment and Support Rubric in 2017. This comprehensive rubric was used to support and evaluate educational leaders. Prior to the existing COVID-19 outbreak, the researcher conducted a similar study to explore the needs of educational based on the Connecticut Leadership Evaluation Support Rubric. However, the COVID years have taken a heavy toll on the nation's public schools. In particular, to date there are no reported survey-based measures of school leaders' professional development needed to perform the contemporary leadership tasks listed in the Connecticut Leadership Assessment Support Rubric. Therefore, in this study, as shown in Table 2, all survey questions were derived from the official Connecticut Leadership Assessment Support Rubric (2017). and modifications were made. Both the internal consistency and construct validity of the survey questions were tested. In this study, four main leadership domain was utilized: (a) instructional leadership, (b) talent management, (c) organizational system, and (d) climate and culture. Self-reported scores on factors are measured on a 4-point scale: 1. No need, 2. Need, 3. Important need, 4. Very important need.

Research Design and Data Analysis

The present study has a quantitative explorative research design that is set to explore the self-reported data of participants regarding the lowest and highest professional development needs of school leaders. Since there are few earlier studies studying relevant context, the study is also descriptive and exploratory in nature. Particularly, the study investigates the training needs of school administrators specific to post-COVID-19 returns. To determine the participating educators' perspective in terms of school leaders' training needs, descriptive statistics (Mean and Standard Deviations) were generated. Descriptive statistics were useful to summarize the large amount of data into four main leadership domains. Additionally, high-reliability scores with alpha coefficients of .92, .92, .95, and .93 per scale dimension indicated a stable factor structure. Particularly, as shown in Table 2, each leadership domain very high Cronbach alpha value .92 or higher per items that indicates a reliable and stable factor structure that could be used in future research studies. All through the data analysis procedures undertaken, JAMOVI Statistical Package has been used.

Table 2. Leadership Domains' Measure of Scale Reliability Statistics

Leadership Domains	Cronbach's α
Talent Management	α=.920
Instructional Leadership	α=.924
Organizational Management	α=.955
Culture and Climate	α=.943

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Since both internal and external factors have the potential to impact the training needs of school leaders. The related predictors and categorical factors are collected. In the future, Multiple Linear Regression can be conducted to understand how well these factors impact the training needs of school leaders. Besides the small sample size, not including advanced inferential statistics can be considered a limitation of this study.

<div align="center">FINDINGS</div>

In this quantitative explorative project, specific to COVID-19 return, the training needs of school leaders are grouped into four main domains which are: Domain 1. Instructional Leadership, Domain 2. Talent Management, Domain 3. Organizational Systems, Domain 4. Culture and Climate. This section addresses 4 research questions in detail. The mean score and standard deviations of each professional development activity by four leadership domains were reported below.

Instructional Leadership Professional Development Activities
In the *first research question,* what are the instructional leadership-related lowest and highest training needs of school leaders? This table illustrates examples of descriptive statistical analysis using the information from the participants' self-reported data. Based on this descriptive analysis, the item "Improving the social, emotional, and well-being of students." has the highest mean score with M=3.45, SD=0.77. In terms of the instructional leadership domain, examining the descriptive statistics, the researcher found that the following four items have also higher mean scores "Using a Multi-Tiered System of Support (MTSS) for all student success (M=3.24, SD=0.84), Improving the performance of underrepresented students (M=3.22, SD=0.89), Implementing a comprehensive school counseling program (M=3.10, SD=1.06). Besides identifying the top 4 training activities regarding instructional leadership, based on the self-reported average scores, the following training activities were rated as "Needed PDs" not as important as others: "Exploring effective face-to-face instructional and assessment practices (M=2.72, SD=0.94)", "Understanding special education law and Section 504 of the Rehabilitation Act (M=2.69, SD=1.02). "Exploring effective online or hybrid instructional and assessment practices (M=2.08, SD=1.05).

Table 3. Means and Standard Deviations of PD Activities by Instructional Leadership

Instructional Leadership Statements	M	SD
Improving the social, emotional, and well-being of students.	3.45	0.77
Using a Multi-Tiered System of Support (MTSS) for all student success	3.24	0.84
Improving the performance of underrepresented students	3.22	0.89
Implementing a comprehensive school counseling program	3.10	1.06
Working collaboratively with school staff to improve teaching and learning	3.08	0.94
Exploring the impacts of COVID-19 on students' learning	2.96	0.92
Improving school success of multilingual learners	2.93	0.93
Creating an accountability system to monitor students' learning	2.92	0.88
Integrating essential 21st-century life skills into the curriculum	2.90	0.95
Improving all students college and career readiness	2.83	0.89
A shared understanding of standards-based best practices in teaching & learning	2.83	0.88
A shared vision, mission, and goals for high expectations for all students	2.82	1.03
Exploring effective face-to-face instructional and assessment practices	2.72	0.94
Understanding special education law and Section 504 of the Rehabilitation Act	2.69	1.02
Exploring effective online or hybrid instructional and assessment practices	2.08	1.05

Talent Management Professional Development Activities
In the *second research question*, participants have been asked to share their perception on school leaders' talent management-related professional development needs to respond to COVID-19. Participants reported relatively high importance need about the following trainings (1) Recruiting, selecting, and retaining a highly qualified and diverse staff (M= 3.23, SD=.85), (2) Providing high-quality and personalized support for early career teachers (M=

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2.96, *SD*=.90), (3) A high-quality professional learning system that supports teacher growth (*M*= 2.91, *SD*=.93), (4) Using a social justice framework to guide diversity, equity, and inclusion work (*M*= 2.89, *SD*=.96). However, related to the talent management domain, it was surprising to see that the participant reported lower levels of need for the following training activities. (1) Teacher mentorship/peer support program to strengthen teaching and learning (*M*= 2.73, *SD*=1.00), (2) Facilitating teacher performance evaluations and providing actionable feedback (*M*=2.59, *SD*=.96), (3) Receiving professional development to lead STEM Education (*M*= 2.45, *SD*=.93).

Table 4. Means and Standard Deviations of PD Activities by Talent Management

Talent Management Statements	M	SD
Recruiting, selecting, and retaining a highly qualified and diverse staff	3.23	0.85
Providing high-quality and personalized support for early career teachers	2.96	0.90
A high-quality professional learning system that supports teacher growth.	2.91	0.93
Using a social justice framework to guide diversity, equity, and inclusion work	2.89	0.96
Comprehensive PD support for systemic leadership growth of school leaders	2.79	0.95
Using a coaching program to support school leaders' performance and growth	2.78	0.98
Teacher mentorship/peer support program to strengthen teaching and learning.	2.73	1.00
Facilitating teacher performance evaluations and providing actionable feedback	2.59	0.96
Receiving professional development to lead STEM Education	2.45	0.93

Organizational System Professional Development Activities

This section addresses research question three in detail. In the third research question, what are the organizational system-related lowest and highest training needs of school leaders? As indicated in Table 3, in terms of the organizational system domain, compared to other training activities "Creating a safe, high-performing learning environment" (*M*= 3.19, *SD*=.91) has the highest mean score and it is the only item that has higher than 3.00 average. It is also important to note that "Maximizing and allocating resources to foster and sustain educational equity for all" (*M*= 2.92, *SD*=.99) and "Creating cohesive school improvement and/or action plans" (*M*= 2.77, *SD*=102.) are rated as important PD needs for school leaders. Moreover, participants reported that "Searching and applying for grants or finding alternative funding resources (*M*=2.74, *SD*=1.01) is listed among top four training needs for school leaders. When it comes to the lower-rated organizational system professional development activities, it is noted that participants indicated a relatively low PD need for the following items: (1) Using energy efficiency programs in K-12 schools (*M*=2.28, *SD*=.96), (2) Creating comprehensive faculty, student, and parent handbooks (3) (*M*=2.27, *SD*=1.06), (4) Using social media and communication systems in the school (*M*=2.20, *SD*=.96).

Table 5. Means and Standard Deviations of PD Activities by Organizational System

Organizational System	M	SD
Creating a safe, high-performing learning environment	3.19	0.91
Maximizing and allocating resources to foster and sustain educational equity for all	2.92	0.99
Creating cohesive school improvement and/or action plans	2.77	1.02
Searching and applying for grants or finding alternative funding resources	2.74	1.01
Creating efficient individual student, faculty and master school schedules	2.73	0.98
Using statistics and data to make leadership decisions	2.71	1.00
Leading safety procedures and safe school climate committee	2.65	1.05
Managing an evidence-based, transparent, and fiscally responsible school budget	2.58	1.07
Creating Computer & technology infrastructure to enhance student learning	2.55	1.01
Implementing transparent school policies and procedure manuals	2.55	1.04
Managing the school transportation, processes for arrival and dismissal	2.54	1.08
Exploring cybersecurity considerations for K-12 schools and school districts	2.47	0.99
Maintaining facilities, playgrounds, cafeteria, equipment, etc	2.45	1.06
Establishing a school leadership team and/or governance council	2.39	1.03
Using energy efficiency programs in K-12 schools	2.28	0.96
Creating comprehensive faculty, student, and parent handbooks	2.27	1.06
Using social media and communication systems in the school	2.20	0.96

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Culture and Climate Professional Development Activities

In the final research question, the mean scores and standard deviations of each professional development activity by school culture and climate domain were reported below Table 4. Particularly, participants reported a relatively high importance need for the following training activities (1) Dealing with difficult people and managing challenging behaviors in schools (M=3.23, SD=.88), (2) Creating and maintaining a positive school climate and culture (M=3.19, SD=.92), (3) Building trust and improving communication among faculty and staff (M=3.12, SD=1.01), (4) Exploring and addressing the impacts of COVID-19 on faculty, parents, students (M=3.06, SD=.93).

As a following up, besides identifying the top 4 training activities regarding school climate and culture, based on the self-reported average scores, the following training activities were rated as "Needed PDs" not as important as others: (a) Implementing Positive Behavior Interventions and Supports (PBIS) (M=2.76, SD=1.05), (b) Using ethical decision-making model to plan for the resolution of ethical dilemmas (M=2.67, SD=.97) and (c) Exploring legal and ethical issues in education and leadership (M=2.56, SD=1.00).

Table 6. Means and Standard Deviations of PD Activities by Organizational System

Culture and Climate	M	SD
Dealing with difficult people and managing challenging behaviors in schools	3.23	0.88
Creating and maintaining a positive school climate and culture	3.19	0.92
Building trust and improving communication among faculty and staff	3.12	1.01
Exploring and addressing the impacts of COVID-19 on faculty, parents, students	3.06	0.93
Using restorative discipline programs to create to positive/safe learning environment	3.01	0.94
Expecting the unexpected: Implementing effective crisis management systems	2.98	0.97
Using self-care and well-being strategies for school leaders and educators	2.98	1.01
Focusing on increasing diversity and equity across the community and curriculum	2.98	0.98
Developing effective school, family engagement to increase students' success.	2.97	0.94
Understanding Culturally Responsive School Leadership (CRSL)	2.92	0.96
Ensuring educational professionalism, ethics, integrity, justice and fairness for all	2.79	1.08
Implementing Positive Behavior Interventions and Supports (PBIS)	2.76	1.05
Using ethical decision-making model to plan for the resolution of ethical dilemmas	2.67	0.97
Exploring legal and ethical issues in education and leadership	2.56	1.00

DISCUSSION

This descriptive research study provides a summary of training needs of school admins right after the COVID-19 pandemic. The majority of schools have been closed during the pandemic. These closing gave the school districts an opportunity to rethink education (Zhao, 2020). To respond to the COVID-19 pandemic, this quantitative study is designed to improve understanding of school leaders' comprehesnive needs in terms of various professional development activities. The results indicate the high and low training needs of school admins into four main domains. In this section, the researcher discusses the schools' main roles to improve the capacity of school principals to meet the diverse needs of students. Particulalry, the findings of the study show that the needs of educational leaders change based on the four leadership domains.

Overall, participants' perceptions of creating a safe school enviremventg emerged as one of the highest PD needs for school leaders. The findings of this study support the previous research that the priority must be the well-being of leaders, educators, learners, parents, and all stakeholders involved in the reopening of school life (Harris, & Jones, 2020). Since many learners from K-12 schools were isolated at home with limited social life with their friends, scholars do not know the long term effects of COVID-19 pandamic, While students face isolation problems, many caregivers struggled with losing their jobs. The emotional and financial damages of COVID-19 are difficult to calculate. Particularly, it is noted that many student and parents faced with financial hardships, as

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well as other experiences that cause emotional trauma. Therefore, it is crucial to support for both academic and emotional well being of all learners (Darling-Hammond, & Cook-Harvey, 2018).

Besides increasing students' psychological well being, in this quantitative study, it is reported that district and school admins should be encouraged to be trained for utilizing a Multi-Tiered System of Support (MTSS) to increase the performance of disadvantaged students. Online teaching practices are one of the most important impacts of COVID-19 in education. The results are aligned with the previous research findings, more comprehensive and collaborative efforts are needed to meet the diverse needs of K-12 students (Darling-Hammond and Hyler, 2020). Since the COVID-19 forced educators to teach virtually, educational leaders are encouraged to provide training activities on computer, technology for effective online learning integration.

It is also noted that principals will benefit from getting training and professional development activities about managing dealing with difficult behaviors. Since the schools are getting more diverse and students' profile are changing, it is equally important to find, prepare and develop highly qualified and faculty and staff with diverse background. Most importantly, the pandemic showed the educators that schools should be ready for unexpected conditions that might impact teaching and learning activities. Therefore, the results encourage district admins and educational leaders participate in professional development activities regarding trauma and crise interventions to create positive school climates for school faculty, staff and all learners. Since school principals also play key role in faculty hiring technology literate teachers so they can use digital tools and technologies.

The Implications for Leadership and Policy
There are several studies focus on the impacts of COVID-19 on education, teaching and learning (Chapman and Bell, 2020). Many policy makers and educational leaders consider the pandemic as an opportunity to change and improve the current education system. Therefore, the results of the study can be utilized to develop comprehensive and research-supported training activities to improve the capacity of educational leaders and educators. The findings are also instrumental to build target PD models. The next section is designed to provide school admins and related stakeholders with practical strategies effectively improve student and school success.

*Leadership for social justice, equity and diversity training***.** As Gümüş, Arar, and Oplatka (2021) indicated providing equity and access for all has been always an important focus of education. Since the COVID-19 pandemic caused several inequality issues such as limited access to technology and internet, it is crucial for principals receive systemic training and support addressing achievement gap issues. These types of training activities might help school leaders to build knowledge and confidence to understand challenges and enhance success of all students regardless of their gender, income, ethnicity and language background.

Innovative organizational system management training. The pandemic forced all key stakeholders to work collaboratively to meet the academic, social and emotional needs of diverse student population (Harris, 2020). There are different types of leadership styles, collaborative and distributed leadership approaches are recommended to improve the effectiveness of the school system. The school-wide partnership will also help the system to maximize the efficacy of limited resources and materials. Therefore, the results encourage school leaders to develop short and long term school management and improvement plans. It is also crucial that schools generate alternative funding opportunities.

*Whole child and social-emotional learning (SEL) training***.** Apart from getting good grades, the COVID-19 pandemic crisis has brought focus on the social and emotional welfare of both students and teachers. Therefore, educators are encouraged to apply effective strategies for social-emotional learning (SEL) and emotional health. Students faced significant challenges due to the pandemic isolation and needed strong emotional support. Teachers also feel pressured due to increased health issues, heavy workloads and assessments. Particularly, during the COVID-10 pandemic, senior teachers have been affected due to their health conditions. Schools faced serious staff shortages. As a result, it's important that school principals get specialized training in creating and applying holistic school counseling methods and understanding mental health matters. Given that establishing a positive and inclusive atmosphere in schools that fosters the well-being of both students and staff is highly crucial, it is equally essential for school administrators to undergo training in SEL such as the Developmental Pathways Framework. Dr. Comer highlights six specific domains of child and adolescent development (physical,

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moral, social, psychological, academic, and speech and language, which play a pivotal role in academic learning (Comer, Joyner, and Ben-Avie, 2004)

Data-driven decision-making training. Given the complex changing needs of students and educators after the COVID-19 pandemic, it is crucial to prioritize educational training in data analysis and evidence-based decision-making, as highlighted by the findings of this study. Specifically, utilizing comprehensive datasets can provide valuable insights into tracking the progress of student achievement and enable educators to establish links between leadership effectiveness and student learning outcomes (Grissom, Egalite, and Lindsay, 2021). To explore the impact of principals on the success of students and schools, educational leaders are encouraged to focus on improving their skills in data analysis and interpretation, allowing them to make well-informed decisions regarding student achievement and resource allocation. Additionally, school-based training programs should prioritize the use of student achievement data to identify areas in need of improvement and implement evidence-based practices for enhancing school performance.

Innovative instructional strategies. As a response to COVID-19, virtual learning and e-tools are being employed. In order to meet the learning needs of students both primary and secondary educational institutions, as well as colleges and universities, have been implementing creative methods of remote teaching and virtual learning, enabling students to continue their studies both in the classroom and from home (Anthony and Noel, 2021). After COVID-19, many institutions decided to continue these e-learning tools. Consequently, it is imperative for educational administrators to receive proper training on online teaching and learning techniques to effectively involve students in virtual learning environments, assist teachers in adjusting their teaching methods, and address any inequities regarding to technology accessibility and connectivity.

Parent and community engagement. Educational leaders are encouraged to collaborate with key stakeholders to improve the academic, social, emotional, and career development of students. School leaders reach out to parents and their communities because they cannot succeed in isolation. (Garza, Drysdale, Gurr, Jacobson, & Merchant, 2014). Research studies show that effective family engagement in schools contributes to positive student outcomes, including improved student achievement, decreased disciplinary issues, improved parent-teacher and teacher-student relationships, and improved school climate (Henderson, and Mapp, 2002). Furthermore, school leaders are encouraged to receive systemic training on parent and community engagement strategies. Effective collaboration with parents and the community is crucial in supporting student learning and well-being. As Yavuz and Robinson (2018) indicated using comprehensive and research-supported professional development models that include community-wide collaborative efforts are important to prepare and develop future educational leaders.

Educational leadership micro-certificates. As Jacobson (2011) indicated Previous effective school leadership has a significant impact on student achievement and school success, particularly in challenging, high-poverty urban schools. Supporting the systemic training and professional development of school leaders through ongoing and creative training such as structured leadership microcertifications is essential. Since the current certified principals already invested a significant amount of time and effort to be certified, it is not realistic to ask them to complete another formal education or degree. Microcertification can be considered as a non-traditional learning method where school leaders and teachers can develop a set of skills in a specific area and become certified in a matter of days, unlike a multi-year program that takes longer time and financial commitment. For instance, due to the impact of COVID-19, many educators may consider getting a micro certification to advance their careers. Microcertification also supports unemployed educators who seek skills development and career opportunities in education and leadership areas. This project identified the high needs of school leaders. The microcertification program with supported research resulting from this project can help colleges and universities develop well-trained school leaders who can lead schools through the changes and challenges posed by COVID-19.

In conclusion, this quantitative explorative study contributes to existing leadership training knowledge by addressing the professional development needs of educational leaders after the 9pandemic. The purpose of identifying systemic training needs is to facilitate the development of competent and effective school leaders who can skillfully navigate the challenging post-COVID education environment and bring about positive change in K-12 schools. The findings highlighted the critical importance of investing in the training and professional development of school leaders to develop the skills and knowledge needed for the post-pandemic era. The long-term social, and emotional impacts of COVID-19 on students and educators are still unknown, however, it is

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noted that educators and school leaders need community-wide collaborative efforts with a long-term school improvement project for all student success.

Consequently, ongoing training programs are essential to meet the complex needs of the school system. By addressing the urgent training needs, school leaders can better improve their schools, support their staff, and provide a positive learning environment for all students. As the educational landscape changes in the post-COVID era, it is important for both teachers and school leaders to adapt and tailor professional learning opportunities to meet the current needs of learners(Darling-Hammond, Hyler, 2020). In addition, the range of training needs identified among school leaders in this study encourages rethinking and innovation in leadership preparation programs. Particularly, school leadership training programs are encouraged to revist their curriculum to better prepare future leaders in instructional leadership, talent management, organizational system, and positive school climate to meet the evolving educational challenges of a post-pandemic world.

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