A Systematic Review of Mindfulness in School Principals

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Research regarding the practice of leaders' mindfulness has increased over the past several years. Emphasis on principals' mindfulness practices helped educational leaders become stronger during these uncertain and stressful times. Specifically, researching how principals use mindfulness in a school setting advances educational leadership by exploring this relationship. This systematic review aimed to understand how principals use mindful practices in their schools and relationships with their stakeholders. Attributes of mindfulness used in their leadership practices were explored to influence ways to enhance educational leadership training. Fourteen peer-reviewed research studies from 2010-2021 were reviewed. There were five key themes identified related to a principal's use of mindfulness: (a) school organization, (b) decision-making, (c) well-being, (d) leadership attributes, and (e) student success. This article concluded by discussing the key findings and suggestions to guide future research on principals' mindfulness.

Keywords: well-being, mindfulness, principal, organizational trust, decision-making

Over the past few decades, the term "mindfulness" has become well-known in various aspects of society. New mindfulness-based mobile apps such as Headspace and Fitbit's new Mindful Method program help individuals pursue the benefits of mindful living and practices. Mindfulness is the cultivation of the ability to pay attention to the present moment non-judgmentally, be self-aware, observe, and accept one's unaltered thoughts, sensations, and emotions (Day & Gregory, 2017). Research specific to the practice of leader mindfulness has increased over the past ten years. Professional fields across disciplines have implemented mindfulness-based stress reduction programs to help leaders face difficult decisions (Mahfouz, 2018; Wells, 2013). This trend has also seen an increased emphasis on school principals. Schools have faced uncertain times due to Covid, accountability, and the need for trauma-informed pedagogy and practice (Huber & Helm, 2020). However, to date, education research has not focused on how mindfulness might advance and strengthen education leadership in relation to stakeholders (Brion & Gullo, 2020; Hoy et al., 2006: Mahfouz & Richardson, 2020). Therefore, this study aimed to understand how principals might use mindful practices in their schools and in their relationships with stakeholders.

Educational administrative decision-making requires more than the mechanical application of existing rules and regulations at various school and school-related policies (Hoy et al., 2006). School leaders' duties consist of complex decisions and thoughtful processes rather than merely possessing and carrying out specific technical tasks to ensure effective and efficient organizational operations management (Sergiovanni, 2009). Twenty-first-century K-12 principals are expected to make high-level professional decisions and respond to difficult, sometimes tense situations throughout the school year. The following systematic review examined the literature on how the use of mindfulness by principals influenced their daily practice. The research question guiding the study was as follows: What does the research in the last ten years find about principals' use of mindfulness?

Methods

Research material included in this study focused on principals' use of mindfulness in a school setting. The review included scholarly peer-reviewed articles from 2010-2021 and seminal works related to educational leaders' decision-making and mindfulness. In this study, administrators included principals who work in urban, suburban, and rural geographic areas, serving students from diverse racial, ethnic, and socioeconomic neighborhoods. There were no restrictions on articles that included administrators regarding gender, race, ethnicity, age, socioeconomic status, or sexual orientation.
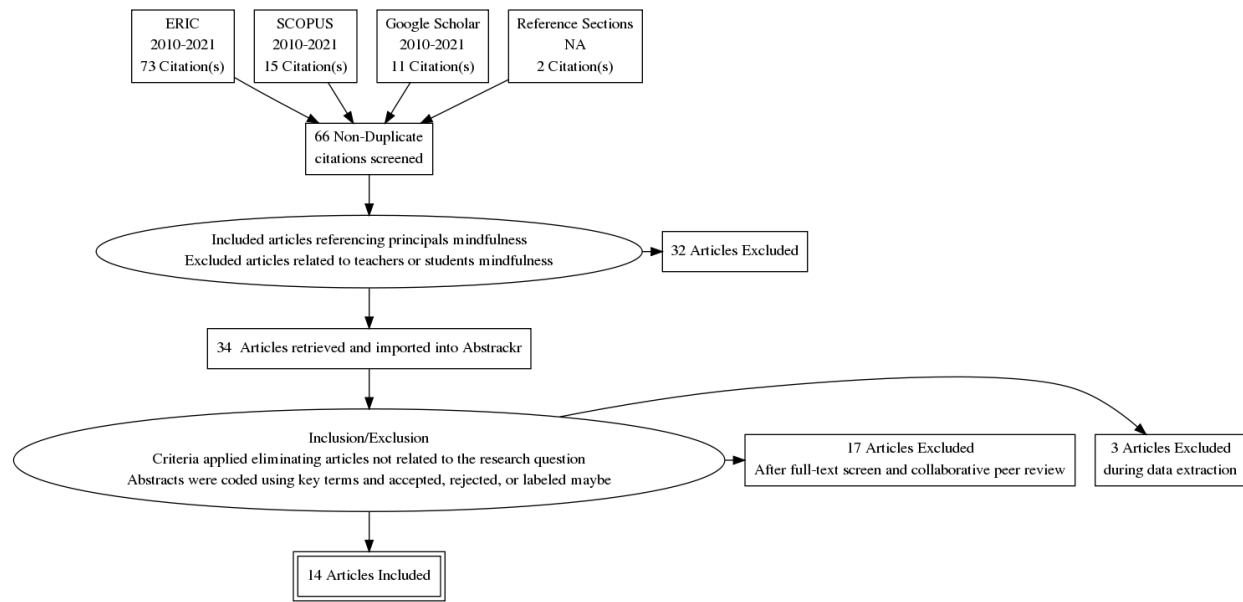
Computerized research databases ensured that the research material met scholarly standards. Education Resources Information Clearinghouse (ERIC) represents a comprehensive digital library of education research and information sponsored by the Institute of Education Science (IES) of the US Department of Education and is recommended by top research methods publishers (Creswell & Creswell, 2018; Galvan & Galvan, 2017). Abstracts from peer-reviewed publications published between 2010 to 2021 were searched to reflect the most current research using this database. The following search criteria yielded seventy-three articles: (a) AB=*Principals* or *School leaders* or *administrators* AND AB= *Mindfulness* (b)AB=*Principals* or *School leaders* or *administrators* AND AB= *Self-awareness* (c)AB=*Principals* or *School leaders* or *administrators* AND

AB= *Self-aware** or *self-aware**AND *mindful** (d) AB=*Principals* or *School leaders* or *administrators* AND AB= *decision making* or *decision-making* or *decision-making process* or *decision-making process* AND *mindful** (e) Select a field =*educational administration* or *educational leadership* or *school administration* AND Select a field = *mindful**. After searching ERIC, SCOPUS, a research database published by Elsevier, was used to search for articles not contained in the previous ERIC searches. The following search terms, which yielded fifteen articles, were used in SCOPUS: *Educational leadership, school principal, mindfulness* (ALL FIELDS). Google Scholar, another highly used research tool, surfaced eleven additional articles. Finally, reference sections of articles yielded two seminal works that were referenced in several articles. The result of all these searches provided sixty-six unique listings. After an inspection of the articles, thirty-two articles were removed whose abstracts did not include references to principals and mindfulness in a school setting.

Thirty-four sources that met the identified criteria were imported into Abstrackr (Wallace et al., 2012), an abstract screening tool created by Brown University. Articles were then screened using key terms and labels containing the words mindfulness, principals, and self-aware to select the abstracts to include in the systematic review. An abstract screening process using Abstrackr ensured the quality and criteria of the literature chosen for review. An initial screening of all the article abstracts included labeling the key terms and marking the articles as yes, no, or maybe. Hence, twenty articles were marked yes, five articles no, and nine articles maybe. An additional peer researcher participated in collaboratively screening each article's abstract and reviewing content to determine if the article met the research question criteria. Each article was screened by both parties to eliminate and identify that the literature met the inclusion and exclusion criteria. Keywords and labels, including principals, decision-making, mindfulness, self-aware, school leaders, and administrators, were chosen to assist the screening process and represent the literature review's emphasis on principals' use of mindfulness in a school setting. After an extensive screening process, seventeen of thirty-four articles were eliminated due to the abstracts not meeting the literature review criteria of principals' use of mindfulness and inclusion/exclusion criteria listed above. Fifteen articles and two dissertations qualified according to the inclusion criteria. After data extraction, an additional three articles were removed due to a lack of support for the research question. A visual representation of this process is included in Figure 1.

Figure 1
Research Process

ERIC
2010-2021
73 Citation(s)

SCOPUS
2010-2021
15 Citation(s)

Google Scholar
2010-2021
11 Citation(s)

Reference Sections
NA
2 Citation(s)

66 Non-Duplicate
citations screened

Included articles referencing principals mindfulness
Excluded articles related to teachers or students mindfulness

32 Articles Excluded

34 Articles retrieved and imported into Abstrackr

Inclusion/Exclusion
Criteria applied eliminating articles not related to the research question
Abstracts were coded using key terms and accepted, rejected, or labeled maybe

17 Articles Excluded
After full-text screen and collaborative peer review

3 Articles Excluded
during data extraction

14 Articles Included

After the articles were collaboratively reviewed by two researchers, a quality check was performed to ensure the articles met the following criteria:

- Did the author adequately answer the research question?
- How was the study designed, and did it sufficiently answer the question?
- Did the data collection provide rich descriptive information if qualitative or detailed analysis if quantitative?

All articles reflected in these findings met the quality criteria and represented research on principals' use of mindfulness in school settings.

Findings

Descriptives

Using information gathered from each of the articles in the final list, the researcher created an Author Inclusion Table (AIT), which provides the following information for each article in tabular format: (a) author(s), (b) year of publication, (c) research method (i.e., quantitative, qualitative, mixed-method), (d) research design (i.e., survey, interview, observation, database analysis, narrative), (e) sample size, (f) setting (i.e., elementary, middle school/junior high, high school), and (g) study purpose as defined by the author(s). Author Inclusion Table (AIT) is provided in Table 1. The review included six quantitative, six qualitative, and two mixed-methods studies. Articles represented research of public schools at all levels: elementary, middle, high school, and university principal preparation programs. Several studies reflected research emphases on stakeholder trust, school reform, well-being, organizational trust, faculty perceptions, and professional development. Principals chosen for these studies represented four international K-12 studies, eight US K-12 studies, and two US principal preparation programs.

Table 1
Author Inclusion Table (ATI)

Author(s) (year of publication)	M	R	P	ST	Purpose – Related to Principals' Mindfulness

		M	R	P	ST	
1	Brion & Gullo (2020)	Ql	I	11 US Principals	E, MS, HS	Principals' Perspectives
2	Diotaiuti et al. (2020)	Qn	S	419 Italian Principals	E, MS, HS	Benefits of Mindfulness
3	Fitzgerald (2012)	Ql	I	10 US Principals	E	Transformation Leadership
4	Garcia-Post (2016)	X	S, I	10 US Principals	E, MS, HS	Mindfulness in School Reform
5	Hoy et al. (2006)	Ql	I	75 US Middle Schools	MS	Organizational Trust
6	Kearney et al. (2013)	X	S, I	149 US Schools	E, MS, HS	Teacher Perceptions
7	Klocko & Wells (2015)	Qn	S	708 Principals	E, MS, HS	Mindfulness Practices Explored
8	Mahfouz (2018)	Ql	I	13 Administrators	E, MS, HS	CARE and Mindfulness
9	Mahfouz & Richardson (2020)	Qn	S	180 Students, 30 Programs	U	Principal Preparation Well-being
10	Ryan (2020)	Ql	I	1 School District	E, MS, HS	Mindfulness and SEL
11	Tabancali & Ongel (2020)	Qn	S	495 Instanbul Teachers	MS, HS	Organizational Trust
12	Walker (2020)	Ql	I	12 Jamaican Principals	HS	Mindfulness Use
13	Wongkom et al. (2019)	Qn	S	610 Principals	E	Structural Relationship Model
14	Zelvys. et. al (2019)	Qn	S	335 Norway Teachers	HS	Organizational Climate

M = research method (Qn = quantitative; Ql = qualitative, X = Mixed Method); R = research design (S = survey, I = interview); P = sample size; ST = Setting (E = elementary, MS = middle school or junior high, HS = high school, U=University).

Themes

The systematic review of fourteen peer-reviewed research studies revealed five key themes and ten sub-themes related to principals' use of mindfulness in a K-12 school setting. Table 2 reflects the themes and sub-themes discussed in the following sections of this review.

Table 2

Themes and Supporting Studies

Themes: Principals' Use of Mindfulness	Supporting Studies
1.1 Mindfulness in School Organizations: Stakeholder Trust	3,5,6,10,11,14
1.2 Mindfulness in School Organizations: Stakeholder Relationships	1,3,4,5,6,7,9,10,11
2.1 Mindfulness in Decision-making: Faculty Trust	1,2,3,4,9,11
2.2 Mindfulness in Decision-making: Techniques	1,2,4,9,11
2.3 Mindfulness in Decision-making: Ethics and Equity	1,4
3.1 Mindfulness and Well-being: Self-care	1,3,9,10,12,14
3.2 Mindfulness and Well-being: Stress	1,3,4,7,8,10,12
4.1 Mindfulness in Leadership: Self-awareness	1,4,9,10,13
4.2 Mindfulness in Leadership: Self-reflection	1,8,9

Principals' Mindfulness and School Organizations

When reviewing the research articles related to principals' mindfulness and school organizations, two specific sub-themes developed: (a) stakeholder trust, and (b) stakeholder relationships.

Stakeholder Trust. A principal's mindfulness affected the organizational trust of their school (Hoy et al., 2006; Fitzgerald, 2012; Tabancali & Ongel, 2020). Understanding the concept of mindfulness leads to higher levels of trust by all stakeholders (Fitzgerald, 2012). This trust involved an openness to others' perspectives, consistent communication, and planning with district leaders, parents, and teachers (Hoy et al., 2006).

Principals' mindfulness in developing trust with teachers specifically promoted school mindfulness. This mindfulness reinforced the faculty's trust in the principal (Hoy et al., 2006). Several mindfulness attributes led to faculty trust of principals: benevolence, reliability, competency, honesty, and openness. Mindfulness also promoted shared leadership between principals and teachers, which motivates and empowers the faculty (Garcia-Post, 2016). Hence, the higher the trust level between principals and teachers, the more the teachers interacted with each other, which developed even more organizational trust (Tabancali & Ongel, 2020). Principals' mindfulness encouraged stronger collaboration by promoting collective actions and constructive conflicts between stakeholders. Subsequently, organizational trust was reflected in the level of trust in the principal, level of trust in colleagues, and level of trust in stakeholders (Ryan, 2020; Tabancali & Ongel, 2020).

Campus climate variables included trust and commitment. These variables were found as a solid connection to a principal's mindfulness (Kearney et al., 2013). Findings suggested that schools that have a poor organizational climate have been influenced by unmindful principals. As the principal mindfulness increases, schools tended to show a more positive organizational climate. Interestingly, for schools with a positive organizational climate, the mindful principal was associated with more effectiveness (Zelvys et al., 2019).

Stakeholder Relationships. Principals' mindfulness affected relationships with all school and community stakeholders (Brion & Gullo, 2020; Hoy et al., 2006; Ryan, 2020). In one case study, a school principal stated, "Part of being mindful should be to know students and teachers. We are a community, and we need to work together to help each other" (Brion & Gullo, 2020, p. 126). Relational mindfulness represented a tool for effective leadership. A mindful leader developed not only personal relationship skill-building but also professional relationship skill-building (Brion & Gullo, 2020; Fitzgerald, 2012). Building meaningful relationships was vital to a principal's role as a school leader and was essential to communicating with others. Mindfulness was used to realize this goal through mindful interaction with those around them (Garcia-Post, 2016; Kearney et al., 2013).

Mindfulness in principals reflected constantly communicating and listening to all stakeholder groups and individuals yet maintaining a work-life balance. These were time-consuming, but the leaders must find the time to do these things and maintain a work-life balance (Kearney et al., 2013). Building on the premise that principals must develop relationships to effectively work with the instructional and managerial issues of the school, the researchers in

this systematic review identified various mindfulness attributes that principals use to deal with stressful situations (Klocko & Wells, 2015; Mahfouz, 2018). Leaders who build supportive relationships can manage their stress and make mindful decisions during challenging situations (Mahfouz, 2018, Ryan, 2020).

Mindfulness was also important to teacher-student relationships. The teaching support that teachers showed to students, the classroom climate, and educational content such as behavior and beliefs could be mindfully managed with a more motivational approach. In this respect, teacher mindfulness positively impacted in-class teaching activities and the teacher-student relationship quality (Tabancali & Ongel, 2020). The use of Hoy's (2006) M-Scale showed that principals' mindfulness had a direct correlation to student success (Kearney et al., 2013). The following information helped to understand this relationship: "Regression analyses thus confirmed that two climate variables (teacher trust and principal mindfulness) and four control variables (attendance, socioeconomic status, administrator longevity, and school size) had a significant effect on the independent variable of student success on achievement tests" (Kearney et al., 2013, p. 323).

Principals' Mindfulness and Decision-making

Some of the studies in this systematic review discussed how principals used mindfulness to make thoughtful decisions. Three sub-themes developed from this review were related to their decision-making: (a) faculty trust, (b) techniques, and (c) equity and ethics.

Faculty Trust. Research showed that mindful principals who are transparent with their decision-making promote increased trust and integrity among their faculty and staff (Fitzgerald, 2012, Mahfouz, 2018). In many situations, principals' decision-making process involved collaboration with their teachers. Principals who encouraged teacher participation in decision-making promoted trust with the principal and developed trust among teachers (Diotaiuti et al., 2020; Fitzgerald, 2012). In a study concerning transformational leaders' use of mindfulness, Fitzgerald (2012) said that "transformational leaders use their deeply held beliefs about empowerment to create a transparent decision-making process. There seems to be a strong relationship between transparency in a leader's decision making and transferability in followers' willingness to tackle new or challenging tasks" (p. 53).

Techniques. Research has found that mindful decisions require mindful techniques (Brion & Gullo, 2020; Diotaiuti et al., 2020; Garcia-Post, 2016; Mahfouz, 2018; Tabancali & Ongel, 2020). A principal in Brion's and Gullo's (2020) study claimed, "Before we make an important decision, we pray on it, and to me that is mindfulness, making decisions based on facts and using a quiet mind" (p. 123). Garcia's (2016) study reflected that mindful leaders who make good decisions lead their schools to improve student outcomes significantly. Mastery over social and emotional challenges asserted that principals regulate their emotions and behaviors during a challenging situation. Principals who used mindfulness demonstrated self-awareness and regulated emotions. After using mindfulness attributes, good decision-making followed (Diotaiuti et al., 2020; Mahfouz, 2018).

Equity and Ethics. Research articles in this systematic review outlined mindfulness practices to promote equity. For example, Brion and Gullo (2020) found that principals were involved in a Fellows Equity Program specifically to examine a principal's mindfulness during

equity decisions. Three of the principals identified ways they used mindfulness in decision-making processes. One principal stated he used mindfulness in equity work "by making conscious equitable decisions that impact equity outcomes" (Brion, & Gullo, 2020, p. 123). However, despite being involved in The Equity Fellows Program, principals did not often contribute explicit examples of how they enacted mindfulness when working toward equity, although they did demonstrate the use of mindfulness-related strategies when potentially working towards equity. Garcia's (2016) study on mindfulness in school reform highlighted that justice in sustainable leadership is based on equality or social justice. Principals enforced the provision of equal treatment and support for all persons. Their perspectives considered students and staff as assets. However, Brion and Gullo (2020) reflected that even though principals acted in ways that portrayed ethical mindfulness, they did not comment on the social commitment towards upholding ethics related to social justice while being mindful. Equity training that focused on mindfulness assisted in developing more ethically minded principals (Brion & Gullo, 2020).

Mindfulness in Well-Being

The third theme discussed in this review, mindfulness in a principal's well-being, produced two sub-themes: (a) self-care and (b) stress. Findings related to how principals perceived their self-care and levels of stress are listed in this section.

Self-care. Research concerning the importance of a principal's well-being and its relationship to mindfulness was documented in several articles (Brion & Gullo, 2020; Fitzgerald, 2012; Mahfouz, 2018). Two themes related to a principal's mindfulness were self-care and stress. In Fitzgerald's (2012) study regarding transformational leadership and mindfulness, a Mindfulness Attention Awareness Scale (MAAS) tool was used to measure principals' mindfulness. One of the leading indicators of mindful leadership in a principal's high MAAS score is the inner drive to empower others. Fitzgerald (2012) stated that mindfulness is defined as a higher consciousness associated with well-being. Mahfouz's (2018) study investigated principals who participated in the Cultivation Awareness and Resilience in Education (CARE) mindfulness training. This program focused on the importance of self-care and how it relates to being mindful. For many of the participants in the CARE program, this training allowed them to reflect on their well-being and how they could change their lifestyles to better meet the demands and expectations of their roles as principals.

A study of rural principals documented the effects of a Mindfulness-Based Stress Reduction (MBSR) training program on their well-being. The training influenced a principal's understanding of the needs and perspectives of their students and families, which creates a more holistic notion of each student's success (Ryan, 2020). On the contrary, a study of Jamaican principals pointed to a lack of mindfulness-based training that could enhance their self-care, hence well-being. There was no evidence of policies or programs that have been implemented to prioritize their well-being (Walker, 2020). According to Zelvys et al. (2019), an effective school is an educational institution that works systematically and continuously for self-improvement to achieve its goals by maximizing its physical and human resources while maintaining the well-being of teachers and students. Principals' use of mindfulness to support their well-being was related to the school's climate.

Stress. This section explicitly addressed the principal's use of mindfulness as a tool for stress reduction. Several studies in this systematic review documented that principals faced many issues and situations that caused them stress (Brion & Gullo, 2020; Mahfouz, 2018; Klocko & Wells, 2015; Walker, 2020). Research indicated that mindfulness-based tools such as MBSR and other mindfulness professional development training assisted principals in reducing their stress levels (Fitzgerald, 2012; Mahfouz, 2018; Ryan, 2020). Garcia's (2016) study on leadership reform described a principal's perception of "not letting others feel your stress when, as a leader, there are tasks to be done" (p. 147). Principals' stressors caused significant issues and required support to help them address these while leading. Mindfulness benefits offered new possibilities to help school leaders thrive in their agency. University programs supported principals through additional research on mindfulness, training at the university level, workshops, and retreats (Klocko & Wells, 2015).

Participants across the studies mentioned feeling rushed and stressed due to tasks, expectations, and demands. After CARE, some participants acknowledged that they felt more productive, even though they were busy with standardized testing at the end of the school year. They felt more attentive and focused on singular tasks. Some participants also were less harsh with themselves, refusing to "feel guilty if I didn't finish my to-do list on time" (Mahfouz, 2018, p. 612).

Walker (2020) also found that fifteen Jamaican principals experienced work-related stress and anxiety stemming from work intensification and lack of resources to meet work demands. These principals described relying on mindfulness meditation and prayer to counter the effects of physical stress issues such as headaches and high blood pressure. One principal stated, "I am a Christian [and] God is central to my life and how I operate...I include meditation in my daily routine to relax...it helps with lowering my blood pressure...[and] to keep me calm" (Walker, 2020, p. 475).

Mindfulness and Leadership Attributes

Many studies suggested that the use of mindfulness attributes is a key to effective leadership. These studies reflect the mindfulness attributes of self-awareness, self-reflection, and listening.

Self-awareness. Several research studies documented principals' need for self-awareness (Brion & Gullo, 2020; Garcia-Post, 2016; Mahfouz, 2018; Ryan, 2020). Principals described self-awareness as understanding where they were in the moment and an awareness of their demeanor and body language. Participants stated being focused on or attending to the meeting, person, or conversation (Brion & Gullo, 2020; Garcia-Post, 2016). By using self-awareness, principals respected their relationships with others and controlled their emotions and behaviors during challenging situations (Mahfouz, 2018). In a study by Ryan (2020) of a rural school district, he found that mindfulness-based practices and emphasizing self-awareness helped leaders who desired to cultivate a culture of care in their schools. As these leaders used self-awareness and compassion in their schools, they promoted cultural health and increased community collaboration (Ryan, 2020). In several studies, quantitative tools measured the principal's mindfulness attributes. The data identified self-awareness as a common mindfulness attribute. For example, in an international study of 610 principals in Thailand, four key

mindfulness attributes and their sub-components were identified: self-awareness, good decision, commitment, and compassion (Wongkom et al., 2019).

Self-reflection. Brion's and Gullo's (2020) qualitative study quoted principals' self-reflection in their leadership practices, such as Molly, who stated, "I often ask myself: did I do the right thing today?" (p. 123). Mahfouz and Richardson (2020) conducted a study that used four instruments of measurement: (a) Mindful Attention Awareness Scale (MAAS), (b) Self-Compassion Scale–Short Form (SCS-SF), (c) Rumination and Reflection Questionnaire (RRQ), and (d) The Perceived Stress Scale (PSS). The data reflected that the highest correlations were among reflection and self-compassion, which was strong in their relationship to mindfulness. The data also found that all four scales used were somewhat linked to one another. Aspiring principals' mindful experiences were related to age and experience (Mahfouz & Richardson, 2020).

In Mahfouz's (2018) qualitative study, thirteen school administrations used Jennings et al. (2011) Cultivating Awareness and Resilience in Education (CARE), a mindfulness-based professional development program that helps leaders understand and develop mindfulness practices. The qualitative study showed that although essential components of CARE are based on self-reflection from practical and policy perspectives, school administrators are not provided adequate space and time to reflect and experiment during school hours (Mahfouz, 2018). The CARE study showed that positive outcomes related to self-reflection and self-compassion developed in the leaders' perceptions. Using self-reflection, leaders improved their ability to recognize their emotional reactions enabling them to understand better their leadership roles in developing their school climates (Mahfouz, 2018).

Listening. The mindfulness skill of listening was prevalent in several research studies. Using the skill of mindful listening was considered a vital practice in school leadership (Brion & Gullo, 2020; Garcia-Post, 2016; Kearney et al., 2013; Mahfouz, 2018; Wongkom et al., 2019). According to Brion and Gullo (2020), principals described mindfulness in four ways: (a) awareness and attention, (b) present centeredness, (c) modeling listening and respect, and (d) decision-making processes. Participants used elements of these representations in both their discussion of equity-focused and leadership-focused mindfulness practices. A novel theme emerging from the data was the concept of modeling listening and respect as a presentation of mindfulness unique to educational leaders. One principal perceived mindfulness as the act of "modeling the behaviors you want to see in others by listening well" (Brion & Gullo, 2020, p. 124). Listening was mentioned by another principal who said, "I am mindful even when I do not have time to listen to someone; I take the time and make myself fully available in the body and mind. I try to be a better listener every day" (Brion & Gullo, 2020, p. 124). Garcia's (2016) qualitative study documented that principals' follow-up with stakeholders helped them know that they were listening to them. Following through with commitment assisted in the development of meaningful relationships with these valuable stakeholders (Garcia-Post, 2016).

Studies referenced in this review identified teachers as an important stakeholder group (Brion & Gullo, 2020; Kearney et al., 2013; Mahfouz, 2018; Ryan, 2020). Principals became more mindful as leaders by listening to experienced and expert teachers who taught them how to work with them. They modeled experimentation, reflection, and recentering on more effective practices for their faculty and became better over time (Kearney et al., 2013). Mahfouz's (2018) study of thirteen principals mentioned a principal who commented that mindful listening enabled her to learn something new about her leadership. Mindful listening to teachers and students helped

another principal to be less reactive and more self-compassionate (Mahfouz, 2018). Listening was also a vital mindfulness attribute in Wongkom's (2019) quantitative study of 610 Thai principals. These studies reflected the mindful attribute of listening as a key component of principals' development of quality relationships and sound decisions in their school settings (Brion & Gullo, 2020; Garcia-Post, 2016; Mahfouz, 2018; Wongkom et al., 2019).

Mindfulness and Student Success

Articles reviewed pointed to mindful principals and their relationship to school climate and student success (Brion & Gullo, 2020; Garcia-Post, 2016; Kearney et al., 2013; Mahfouz, 2018; Ryan, 2020). According to Kearney and colleagues (2013), the analysis of 149 schools in Texas indicated that principal mindfulness made a statistically significant independent contribution to the variance in student achievement. Although this study was not concerned with student achievement, a strong case can be made that mindful schools facilitate higher student achievement. Three articles also mentioned Kearney et al.'s (2013) study reflecting student achievement and its relationship to mindfulness (Brion & Gullo, 2020; Garcia-Post, 2016; Tabancali & Ongel, 2020).

Discussion

This systematic review aimed to synthesize and analyze research on principals' use of mindfulness in a school setting. In the previous sections, findings represented some of the research evidence that has been collected over the past ten years regarding principals' use of mindfulness. This section offers a summary of the themes and some observations about these fifteen studies, emphasizing the relationship between the studies' findings. Furthermore, implications regarding future research follow these observations.

First, principals' use of mindfulness and its relationship to organizational trust represented most articles in this study. The principals' use of mindfulness positively influenced the trust of all stakeholders in a school setting. A principal's relationship with staff, faculty, district leadership, parents, and the greater community was vital to success. This review reflected mindfulness practices in developing the trust needed to help stakeholder relationships flourish. During this review, a greater need for professional mindfulness development was apparent to enhance principals' understanding of mindfulness and its implications on organizational trust and relationships. Only two of the studies, Mahfouz (2018) and Ryan (2020), examined mindfulness training and its effects on principals' use and understanding.

Second, the effect of mindfulness training and emphasis on principals' decision-making is frequently documented in these studies. The inter-relationship of mindfulness attributes in leaders and their decision-making permeates this research. Limited articles included information regarding principals' use of mindfulness and its effect on ethical decision-making. The relationship between mindfulness and ethical decision-making has been researched and documented (Frick, 2011; Mullen, 2017). Influential education leaders encounter high-stakes decisions frequently in their roles. Neither the mindfulness questions nor scales adequately reflected the relationships between mindfulness and, specifically, ethical decision-making.

Third, the theme corresponding to a principal's well-being and the relationship to mindfulness also represented a substantial amount of the research in this review. Emphasis on social-

emotional learning (SEL) was prevalent, and measurement scales reflected the need for more comprehensive tools to measure the relationships between mindfulness, SEL, and well-being (Mahfouz, 2018).

Finally, two studies represented comprehensive frameworks reflecting mindfulness in educational leadership (Brion & Gullo, 2020; Wongkom et al., 2019). In comparing the two frameworks, self-awareness and decision-making were common among both frameworks. Another similar theme was compassion (Wongkom et al., 2019) and Modeling Listening and Respect (Brion & Gullo, 2020). Establishing mindful educational leader frameworks is key to supporting research and training regarding principals' mindfulness.

Implications

Several articles suggested exciting implications for future research. Three possible research areas are principals' mindfulness related to student success, student equity, and ethical decision-making. A key concept, in general, suggests the need for more research regarding the use of mindfulness-based training and practices within a K-12 school setting and its impact on student success. Research in the studies regarding organizational trust and mindfulness represents a positive school climate, leading to better faculty communication and possibly increased student success. Another area of future research is principals' mindfulness and student equity. Principals' understanding of how mindfulness related to student equity was not well defined. During the COVID-19 pandemic, student equity has increased because of the move to an online learning environment and the lack of resources to accommodate marginalized students' social, emotional, and learning needs. Finally, principals' use of mindfulness in ethical decision-making would benefit principal preparation programs and professional development programs to implement mindfulness-based training directed towards mindful decision-making when dealing with ethical choices in a K-12 school setting.

References

Brion, C., & Gullo, G. L. (2020). Principals' perspectives of mindfulness for leadership and equity structured. *International Journal of Teaching and Case Studies, 11*(2).

Creswell, J. D., & Cresswell, J. W. (2018). *Research design: qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Day, D. V., & Gregory, J. L. (2017). Mindfulness as a prerequisite to effective leadership: Exploring the constructs that foster productive use of feedback for professional learning. *Interchange*, *48*(4), 363–375. https://doi.org/10.1007/s10780-017-9307-0

Diotaiuti, P., Mancone, S., Bellizzi, F., & Valente, G. (2020). The principal at risk: Stress and organizing mindfulness in the school context. *International Journal of Environmental Research and Public Health*, *17*(17), 1–14. https://doi.org/10.3390/ijerph17176318

FitzGerald, S. (2012). Using mindfulness to build a transformative school culture: A phenomenological study of elementary school principals who create an atmosphere of academic rigor and teacher effectiveness. *ProQuest LLC*.

Frick, W. C. (2011). Practicing a professional ethic: Leading for students' best interests. *American Journal of Education*, *117*(4), 527–562. https://doi.org/10.1086/660757

Galvan, J. L., & Galvan, M. C. (2017). *Writing literature reviews: a guide for students of the social and behavioral sciences (7th edition).* Routledge.

Garcia-Post, A. (2016). A quest for consciousness: A mixed-methods approach to exploring leaders' mindfulness in elementary and middle school reform. *ProQuest LLC*.

Hoy, W. K., Gage, C. Q., & Tarter, C. J. (2006). School mindfulness and faculty trust: Necessary conditions for each other? *Educational Administration Quarterly*, *42*(2), 236–255. https://doi.org/10.1177/0013161X04273844

Huber, S. G., & Helm, C. (2020). COVID-19 and schooling: evaluation, assessment and accountability in times of crises—reacting quickly to explore key issues for policy, practice and research with the school barometer. *Educational Assessment, Evaluation and Accountability*, *32*(2), 237–270. https://doi.org/10.1007/s11092-020-09322-y

Jennings, P. A., Snowberg, K. E., Coccia, M. A., & Greenberg, M. T. (2011). Improving classroom learning environments by cultivating awareness and resilience in education (CARE): Results of two pilot studies. *The Journal of Classroom Interaction*, *46*(1), 27-48.

Kearney, W. S., Kelsey, C., & Herrington, D. (2013). Mindful leaders in highly effective schools: A mixed-method application of Hoy's m-scale. *Educational Management Administration & Leadership*, *41*(3), 316-335.

Klocko, B. A., & Wells, C. M. (2015). Workload pressures of principals: A focus on renewal, support, and mindfulness. *NASSP Bulletin*, *99*(4), 332-35.

Mahfouz, J. (2018). Mindfulness training for school administrators: Effects on well-being and leadership. *Journal of Educational Administration*, *56*(6), 602–619. https://doi.org/10.1108/JEA-12-2017-0171

Mahfouz, J., & Richardson, J. W. (2020). At the crossroads: Well-being and principalship preparation. *Journal of Research on Leadership Education*. https://doi.org/10.1177/1942775120933914

Mullen, C. A. (2017). What's ethics got to do with it? Pedagogical support for ethical student learning in a principal preparation program. *Journal of Research on Leadership Education*, *12*(3), 239–272. https://doi.org/10.1177/1942775117701258

Ryan, A. M. (2020). Conceptualizing a pedagogy of wellness for rural district leadership: Leading, healing and leading self-healing. *Journal of Educational Administration*, *58*(4), 454-466.

Sergiovanni, T. J. (2009), *The principalship: A reflective practice perspective*. Allen & Bacon.

Tabancalı, E., & Öngel, G. (2020). Examining the relationship between school mindfulness and organizational trust. *International Education Studies*, *13*(6), 14. http://doi.org/10.5539/ies.v13n6p14

Walker, A. R. (2020). "God is my doctor": Mindfulness meditation/prayer as a spiritual well-being coping strategy for Jamaican school principals to manage their work-related stress and anxiety. *Journal of Educational Administration*, *58*(4), 467–480. https://doi.org/10.1108/JEA-06-2019-0097

Wallace, B. C., Small, K., Brodley, C. E., Lau, J., & Trikalinos. T. A. (2012, January 28-30) *Deploying an interactive machine learning system in an evidence-based practice center: abstrackr*. [Paper presentation]. ACM International Health Informatics Symposium (IHI), Miami, FL, United States.

Wells, C. (2013). Mindfulness in academia: Considerations for administrative preparation. *Education Leadership Review*, *14*(3), 1–11.

Wongkom, S., Sanrattana, W., & Chusorn, P. (2019). The structural relationship model of indicators of mindful leadership for primary school principals. *International Journal of Higher Education*, *8*(5), 134–142. https://doi.org/10.5430/ijhe.v8n5p134

Želvys, R., Zabardast, A., Nemati, S., Adak, K., & Shariati, O. (2019). Mindful principals in effective schools: Mediating role of organizational climate and organizational citizenship behavior. *Pedagogika*, *133*(1), 5–27. https://doi.org/10.15823/p.2019.133.1