

ORIGINAL ARTICLE

An Assessment of Principals' Cultural Intelligence, Leadership Efficacy, and Preparedness

Loietta N. Holmes¹  & Warren Hope^{2*} 

¹ Dr., Gadsden County Public Schools, Florida, USA.

² Prof. Dr., Educational Leadership and Counseling, Florida A&M University, Florida, USA.

Ethical Statement

Ethical concerns were addressed throughout each phase of the study. Institutional Review Board (IRB) guidelines and regulations were followed to obtain permission for conducting the research. Application for research permission contained the description and significance of the study in addition to research methods, procedures, and participants. Informed consent form was developed to outline the rights and protections afforded to participants. Additionally, a statement relating to informed consent was included in the web based Qualtrics survey and reflect compliance by participation. A numerical coding system was used to record each survey when submitted to protect the confidentiality of participants. Individuals selected to participate in principal interviews were assigned a pseudonym for use in their description and results reporting.

Funding Information

No funding was received for the study.

Conflict of Interest

No conflict of interest is present in the conduction or the reporting of this study.

ABSTRACT

Today's principals must consider equity, diversity, and inclusion as they are elements that foster safe schools and improve students' academic achievement. Principal preparation programs have been slow to respond to the realities of increased racial, ethnic, and culturally diverse schools nationwide. Research reveals that a cultural gap exists in schools throughout the United States and most administrators and teachers lack experience and training in leading and teaching students of color. To effectively address the learning needs of all students, school leaders must understand the histories and experiences of culturally, ethnically, linguistically, and racially diverse students. This research aimed to determine if there is a relationship among principals' cultural intelligence, leadership efficacy, and preparedness to implement culturally responsive school leadership. Twenty-four secondary school leaders were selected to participate in this study. Two instruments, the Expanded Cultural Intelligence Scale and the Leader Efficacy Questionnaire and interviews were utilized for data collection. Four hypotheses, null and alternative were tested, and one research question was formulated for principals' responses. Data analysis revealed no significant relationship among cultural intelligence, leadership efficacy, and preparedness of the participants. However, there was a meaningful relationship among the four constructs of Cultural Intelligence.

Keywords: Cultural intelligence, leader efficacy, culturally responsive school leadership.

Received: 30/08/2022

Accepted:
31/08/2023

*Corresponding Author

Prof. Dr., Educational Leadership and Counseling, Florida A&M University, Florida, USA.
Email: warren.hope@famuedu

INTRODUCTION

A positive school climate establishes a foundation for a high-performing inclusive school. Educators are essential in creating these climates for students' learning. The increasing diversity in schools require new approaches to leadership in which leaders exhibit culturally responsive organizational practices, behaviors, and competencies. To address the existing student achievement gap between white students and students of color, educators should possess an understanding of racial oppression and exclusionary practices that are present across the country, including schools (Khalifa, 2018). Even schools that have predominantly one culture may benefit from learning and changing the mindset about other cultures. Most principals and teachers of culturally diverse populations are not from the same cultural backgrounds as their students. According to a report published by the U.S. Department of Education [USDOE] (USDOE, 2016), Policy and Program Studies, Service Office of Planning, Evaluation and Policy Development, schools in the United States are currently serving increasingly diverse, multicultural populations and projects that by 2024, 56% of the student population will be minorities. A nationally representative survey of teachers and principals revealed that over 80% of public-school teachers and administrators identified themselves as White (USDOE, 2016).

Culturally relevant and responsive pedagogy have been prevalent in education and school reform discourse over the past 20 years (Khalifa et al., 2016). Banks (2013) reasoned that "schools frequently fail to help ethnic minority and low-income students achieve because they ignore or alienate these students from their home and community cultures and languages" (p. 76). Consequently, educators have been tasked with closing the achievement gap for marginalized students by implementing inclusive equitable school climates. Although work by Gay (2018) focused on teaching practices, it was suggested that education reform could not occur without reforming the entire system, including school leaders. As American public schools continue to change, districts need leaders who can facilitate a transformation in the learning cultures of schools that is equitable for all students to eliminate achievement gaps.

Through legislations such as Every Student Succeeds Act (ESSA), policymakers acknowledged the significance of school principals and their impact on student success and effective instruction. The elimination of academic achievement gaps is a complex undertaking that requires the support of stakeholders and long-term changes in practice. Since the school populations are becoming more ethnically diverse, other approaches to teaching, leading, and shaping school culture is necessary. "For students to learn what their teachers have to offer, they must feel fully appreciated as individuals within the context of their own distinctive ethnic, linguistic, and socioeconomic backgrounds and with their particular genders, sexual orientations, sensory and physical abilities" (Lindsey et al., 2019, p. 15).

The current environment of public-school accountability requires a principal to respond to the needs of an increasingly diverse population of students. Leadership practices should be culturally responsive in keeping up with demographic shifts contributing to increased diversity. School leaders must be aware of the different cultures in their learning community and embody the willingness, attitudes, ethics, and dispositions to work well with culturally diverse individuals (Lindsey et al., 2019). With the cultural demographic changes in today's schools, leaders are presented with challenges that require changes in how schools are led (Darling-Hammond, 2005; Stone-Johnson & Patrizio, 2014).

To facilitate change, school leaders must recognize cultural differences, beliefs, morals, values, the existing cultural environments, the historical context of marginalized and oppressed students, and the behaviors and assumptions associated with white privilege (Dantley & Tillman, 2010; Skria et al., 2004). Aspiring leaders must be allowed to acquire knowledge and skills that are extensive, varied, and authentic in the areas of instructional leadership, school culture,



culture awareness, school improvement, student achievement, and diversity in its many manifestations (Anast-May et al., 2011; Cunningham & Sherman, 2008).

The principal's role is complex, presenting multiple ways to influence classroom instruction and student learning. Every school leader needs a style and strategy to deploy a vision for developing a culturally responsive learning environment. Young et al. (2010) concluded that principals were not prepared to lead in culturally diverse schools and were not capable of advocating policies concerning diversity issues. Using projected population data, students of color will eventually be the majority student population, and as such, it is essential that principals foster school cultures that promote academic success for all students (Horsford, 2011; Santamaria et al., 2014). Furthermore, education scholars recognize a need for school districts to employ leaders who demonstrate knowledge, skills, and dispositions as culturally competent, responsive and socially just leaders (Landa, 2011).

Leadership preparation programs intend to provide principals with the skills necessary to meet the job's needs, expectations, and complexities. Research indicates that principal preparation programs must be relevant to the role and responsibilities of 21st-century leaders and significantly increase the number of highly qualified administrators needed to meet the leadership demand (Superville, 2017). The way principals are prepared is a factor in improving leadership quality in all school settings (The Wallace Foundation, 2012). McKibben (2013) suggested that an essential component in developing and retaining effective principals is the quality of the training program. Inadequate preparation programs leave principals ill-equipped thereby impeding potential student achievement. Several national surveys revealed that over 60% of principals indicated their preparation program was not aligned with their current leadership experiences.

Successful educational leaders are individuals who, through a deliberate and culturally proficient lens, cultivate ongoing success for all students and staff. Cultural proficiency refers to the ability of educators to successfully serve students from diverse backgrounds represented within school populations, particularly racial, ethnic, gender, sexual orientation or economically marginalized groups (Lindsey et al., 2019). Cultural proficiency begins with leaders conducting a self-examination of their beliefs.

School culture represents the values of administrators, teachers, students, parents and the community performed through actions and interactions. School leaders shape the culture within the learning environment. Principals who possess cultural intelligence (CQ) understand their vital role in building relationships and fostering a strong sense of school community in determining the school's culture (Jones & Nichols, 2013). CQ is a multidimensional concept that refers to an individual's ability to relate and collaborate effectively in diverse settings and situations. CQ extends beyond a functional understanding of cultural sensitivity to people's traits and behaviors to adjust when engaging with others from different cultures (Ang et al., 2008; Earley & Ang, 2003). CQ is essential for leaders who recognize that they can no longer function in a cultural autocracy. People of different cultures respond and interact individually and collectively to situations in a given environment; therefore, it is incumbent upon leaders to modify their behaviors accordingly (Livermore, 2015). A leader's ability to want to learn and understand members within the organization is a prerequisite to leading them. Therefore, CQ is vital to effective leadership in multicultural settings (Alon & Higgins, 2005; Ang & Inkpen, 2008).

CQ is comprised of four components: metacognitive, cognitive, motivational, and behavioral intelligence. Metacognitive intelligence refers to how individuals acquire and interpret cultural knowledge. The cognitive domain reflects a general understanding of culture. The motivational and behavioral components refer to the effort applied to

learning and functioning cross-culturally while exhibiting appropriate actions when interacting with individuals from different cultures (Ang et al., 2008). Culturally intelligent individuals can transform the knowledge of difference into appropriate behaviors in culturally diverse situations and settings. These behaviors can manifest as meaningful collaborative relationships to accomplish goals or deliberate and systematic decision-making when determining courses of action involving people from other cultures.

CQ is recognized as the capacity to function across national, ethnic, and organizational cultures effectively (Livermore, 2015). Moreover, CQ represents a mindset that can be learned, which allows school leaders to distinguish between groups of people within a learning environment and adjust their behavior accordingly (Eken et al., 2014). CQ is essential to organizational functions and student outcomes related to effective leadership in the educational environment. Metacognitive CQ describes the level of cultural awareness exhibited by an individual in cross-cultural interactions (Van Dyne et al., 2015). An individual with metacognitive CQ is aware of cultural preferences and devotes time to the analysis and significance of these cultural differences, which, in turn, influence the individual's behaviors and interactions. Metacognitive CQ encourages mindfulness of other people and attention to differences in cultural backgrounds, fosters reflection on the effect of culture on individual values and the impact on thoughts and behavior while promoting self-evaluation and change in the cultural mental models (Van Dyne et al., 2015). Consequently, the more aware individuals are of the cultural differences within their organizations, the more inspired they will be to react and behave appropriately (Gooden et al., 2017).

Cognitive CQ refers to an individual's knowledge of culture and cultural differences within structures allowing them to interact with people in a diverse setting. This knowledge is obtained through experience and intelligence (Earley & Ang, 2003). Cognitive CQ influences a leader's consciousness of the norms, values, beliefs and culture during decision-making in diverse contexts (Van Dyne et al., 2015). Understanding the culture of a society or organization and its various components enables leaders to appreciate the structures that shape social interactions (Ang & Van Dyne, 2008).

Motivational CQ indicates a leader's capability to channel focus and attention to learning about cultural differences to optimize functioning in each situation. When intrinsically motivated to seek knowledge of other cultures, leaders will manifest the drive, energy, and tenacity to be adaptive to different cultural environments. These leaders tend to practice new behaviors and improve their performance over time (Ang et al., 2008).

Behavioral CQ suggests leader competence in using appropriate verbal and nonverbal behaviors when interacting with people in cross-cultural situations (Van Dyne et al., 2015). Behavioral CQ comprises of an array of actions a leader can select to interact with others effectively. These behaviors should be supported by the knowledge of organizational culture while incorporating their personal goals and objectives. Behavioral CQ represents the leader's ability to change verbal or nonverbal actions in an appropriate manner when interacting with cultures new to them. To be a CQ school leader comes with the understanding that "leading in the twenty-first century means maneuvering the twists and turns of a multidimensional world" (Livermore, 2015, p. 24). Principals in modern educational settings must be prepared to lead and advocate for policies and curricula to support the academic achievement of all students in multicultural settings (Khalifa et al., 2016). A school leader's ability to understand students' cultural backgrounds is instrumental in establishing learning environments that facilitate academic success. Leaders who are not prepared with the knowledge, skills and temperaments needed to lead culturally diverse schools will continue to manifest inequities and disparities between students, further widening the achievement gap.

Khalifa (2018) contended that sustained cultural responsiveness is necessary for effective school leadership and must be embedded within the learning environment. Additionally, leaders within school settings must exhibit four behaviors: critical self-reflection, sustained responsive practices, inclusive school contexts, and promotion of student family and community engagement.

Research Questions and Hypotheses

This research sought to determine if there is a relationship between principals' cultural intelligence, leadership efficacy and preparedness to manifest culturally responsive school leadership. One research question was formulated for the inquiry. That question was as the following: "What is the relationship between principals' perceptions of professional development and perceived leadership effectiveness?"

Four hypotheses were put forth, and null and alternative were tested at the .05 alpha level. The hypotheses were as the following.

- H₀1:** There is no relationship between Motivational CQ and leader efficacy.
- H1:** There is a relationship between Motivational CQ and leader efficacy.
- H₀2:** There is no relationship between Cognitive CQ and leader efficacy.
- H2:** There is a relationship between Cognitive CQ and leader efficacy.
- H₀3:** There is no relationship between Metacognitive CQ and leader efficacy.
- H3:** There is a relationship between Metacognitive CQ and leader efficacy.
- H₀4:** There is no relationship between Behavioral CQ and leader efficacy.
- H4:** There is a relationship between Behavioral CQ and leader efficacy.

METHOD

Research Design

A mixed-method design with an explanatory sequential approach was employed. Quantitative data were collected utilizing the Expanded Cultural Intelligence Scale (E-CQS) and the Leader Efficacy Questionnaire (LEQ). Qualitative data were collected through interviews, which explored principals' assessment of their professional preparedness to be effective culturally responsive school leaders.

Setting and Participants

There are 22 traditional public high schools and two combination schools in the Choice School District. A total of 24 principals comprised the population of the study. Two criteria were identified for study participation: (1) current principal of high or combination school, (2) served as a high school principal for a minimum of one year at their current school.

For the quantitative phase of the study, 24 school principals in the district were selected to complete the Expanded Cultural Intelligence Scale and the Leader Efficacy Questionnaire. Participants for the principal interviews included a random selection of combination and high school principals in the district. The sample comprised 24 principals from twenty-two traditional public high schools and two combination schools in the Choice School District, Southeastern United States. Combination schools contain grades 6-12, whereas traditional high schools contain grades 9-12.

Research Permission and Ethical Considerations

Ethical concerns were addressed throughout each phase of the study. Institutional Review Board (IRB) guidelines and regulations were followed to obtain permission for conducting the research. Application for research permission contained the description and significance of the study in addition to research methods, procedures, and who would participate. An informed consent form was developed to specify the rights and protections afforded to participants. Additionally, a statement relating to informed consent was included in the web based Qualtrics survey form and reflect compliance by participation. A numerical coding system was used to record each survey when submitted to protect participants confidentiality. Individuals selected to participate in principal interviews were assigned pseudonyms to use in their description and reporting of results.

Data Collection

Twenty-four principals completed and submitted responses to the Expanded Cultural Intelligence Scale and the Leader Efficacy Questionnaire. Participants also responded to demographic items gender, race, and years of experience. Qualitative data were acquired from seven randomly selected principals among the sample of 24. The qualitative phase of the study explored principals' professional preparedness to provide culturally responsive school leadership. Seven principals participated in semi-structured interviews consisting of six open-ended items derived from the Expanded Cultural Intelligence Scale and the Leader Efficacy Questionnaires. The interviews focused on the preparation activities and professional development received during the principalship to enhance the ability to provide culturally responsive school leadership.

Quantitative Data Collection Procedures

The Expanded Cultural Intelligence Scale and the Leader Efficacy Questionnaire were distributed to participants via the Qualtrics platform through a URL link to school district emails. An informing consent acknowledgement was included as the opening page. Participants had the option to click on the button stating, "I agree to complete this questionnaire," thereby expressing their consent to participate in the study. To facilitate a high response rate, the link to the questionnaire was sent to non-respondents as follows:

1. Five days after the initial survey distribution on December 2, 2021, an e-mail reminder was sent.
2. A second e-mail reminder was sent to non-respondents on December 17, 2021.
3. On January 2, 2022, a third e-mail reminder was sent indicating the importance of the participant's input for the study.

The final response rate for the questionnaire was 100 percent.

Qualitative Data Collection Procedures

The qualitative phase of the study focused principals' professional preparedness to provide culturally responsive school leadership to refine and extend the levels of cultural intelligence and leadership effectiveness in the quantitative phase. Seven principals were randomly selected from the 24 participants for an individual semi-structured interview.

Principal Interview Protocol. The interview consisted of six open-ended questions derived from the results of the Expanded Cultural Intelligence Scale and the Leader Efficacy Questionnaire (See Appendix C). The interviews focused on the preparation activities and professional development received during their principalship to enhance their ability to



provide culturally responsive school leadership.

Selected principals were contacted via email to request their participation for an interview. Principals selected the date and time for the interview based on their availability. Once the interview day and time were confirmed, a calendar invitation was sent to which included the Zoom link for the meeting. Participants received the interview questions and informed consent prior to the scheduled virtual Zoom meeting. Participants were informed that the interview would be recorded and transcribed verbatim. Prior to beginning the interview, participants were asked to read and acknowledge the informed consent. During transcription, participants were assigned pseudonyms for confidentiality. Interviewees were afforded the opportunity to review the contents of the interview after transcription.

Validity. Validity refers to the process of ensuring that an instrument accurately measured what it was intended to measure, in this case high school principals' level of cultural intelligence and leader efficacy. The validity of the Expanded Cultural Intelligence Scale has been established through an extensive validation process demonstrating the instruments' generalizability across multiple global and domestic culturally diverse samples and time intervals (Dyne et al., 2012). The Leader Efficacy Questionnaire has been established to be a valid instrument across multiple study samples and shown to have predictive outcomes (Hannah & Bruce, 2013).

Reliability. Reliability refers to the overall consistency of an instrument to yield repeatedly similar results. Testing conducted for the Expanded Cultural Intelligence Scale assessed the structure of the response scales and the alignment between survey items. To determine the internal consistency of the survey, the Cronbach's Alpha scale was applied to examine the item-measure correlations, item fit, rating scale functioning, unidimensional and generalizability of the instrument. A score of 0.60 to 0.70 indicates an acceptable level of reliability. A score of 0.80 or higher indicates reliability as very good. The Expanded Cultural Intelligence Scale was distributed to 24 participants. The survey consisted of four domains with a total of 39 items. The value for Cronbach's Alpha for the instrument was $\alpha = .83$. The value for Cronbach's Alpha for each domain was: Motivational $\alpha = .69$, Cognitive $\alpha = .87$, Metacognitive $\alpha = .82$, Behavioral $\alpha = .94$.

Testing conducted for the Leader Efficacy Questionnaire assessed the structure of the response scales and the alignment between items. To determine the internal consistency, the Cronbach's Alpha scale was applied to examine the item-measure correlations, item fit, rating scale functioning, unidimensional and generalizability of the instrument. A score of 0.60 to 0.70 indicates an acceptable level of reliability. A score of 0.80 or higher indicates reliability as very good. The Leader Efficacy Questionnaire was distributed to 24 participants. The instrument consisted of four domains with a total of 22 items. The Cronbach's Alpha for the Leader Efficacy Questionnaire was $\alpha = 0.79$ indicating reliability was high.

Data Analysis

Quantitative Data Analysis

IBM Statistical Package for Social Sciences (SPSS) version 28 was utilized for a Pearson Correlation between the score of cultural intelligence domains and the leader efficacy score to determine any levels of significant difference among variables. The test was conducted using an alpha level of .05. The assumption of independence was met by using the total population. The assumption of linearity was reasonable given review of the scatterplot variables. Descriptive

statistics were used to analyze demographic data.

Qualitative Data Analysis

Qualitative data was analyzed using the constant comparative method (Patton, 1990). The constant comparative method is an inductive data coding process used for categorizing and comparing qualitative data for analysis purposes. Theory developed using the constant comparison method was considered “grounded” because it is derived from everyday experience as constituted by the data. Each of the responses were hand-coded and placed into categories for organization and conceptualization. Data retrieved was manipulated and analyzed with the Max Weber Qualitative Data Analysis (MAXQDA) software. The steps in qualitative explication included: (a) organize and prepare the data for analysis, (b) read and review the data, (c) code the data by bracketing chunks of text, (d) generate descriptions and themes, and (e) represent the identified themes in a narrative.

Within MAXQDA, key terms and themes were coded and categorized based on frequency and relevance. The responses from the open-ended items were placed into Max Weber Qualitative Data Analysis (MAXQDA) and categorized based on frequency to illustrate reoccurring themes.

RESULTS

Quantitative Results

Hypothesis 1

Hypothesis 1, null and alternative, stated that there is no relationship between Motivational CQ and leader efficacy and there is a relationship between Motivational CQ and leader efficacy. A Pearson correlation coefficient was computed to assess the linear relationship between principals' Motivational cultural intelligence and leader efficacy (See Table 1). A Pearson correlation is a number between -1 and +1 that indicates the extent to which two variables have a linear relationship. A score of 0 indicates no relationship between variables. There was a negative correlation between the two variables, $r(22) = -.17$, $p = .424$ and not statistically significant at $\alpha = .05$. The negative relationship indicates that a change in Motivational cultural intelligence coincides with an opposite change in leader efficacy to a minimal degree. The results led to a decision to reject the null hypothesis.

Table 1. Relationship Between Motivational CQ and Leader Efficacy

		Motivational CQ	Leader Efficacy
Motivational CQ	Pearson Correlation	1	-.171
	Sig. (2-tailed)		.424
	N	24	24
Leader Efficacy	Pearson Correlation	-.171	1
	Sig. (2-tailed)	.424	
	N	24	24

Hypothesis 2

Hypothesis 2, null and alternative, stated that there is no relationship between Cognitive CQ and leader efficacy and there is a relationship between Cognitive CQ and leader efficacy. A Pearson correlation coefficient was computed to assess the linear relationship between principals' Cognitive cultural intelligence and leader efficacy (See Table 2). A Pearson correlation is a number between -1 and +1 that indicates the extent to which two variables have a linear relationship. A score of 0 indicates no relationship between variables. There was a negative correlation between the

variables, $r(22) = -.16, p = .449$ and not statistically significant at $\alpha = .05$. The negative relationship indicates that a change in Cognitive cultural intelligence coincides with an opposite change in leader efficacy to a minimal degree. The results led to a decision to reject the null hypothesis.

Table 2. Relationship Between Cognitive CQ and Leader Efficacy

		Cognitive CQ	Leader Efficacy
Cognitive CQ	Pearson Correlation	1	-.162
	Sig. (2-tailed)		.449
	N	24	24
Leader Efficacy	Pearson Correlation	-.162	1
	Sig. (2-tailed)	.449	
	N	24	24

Hypothesis 3

Hypothesis 3, null and alternative, stated that there is no relationship between Metacognitive CQ and leader efficacy and there is a relationship between Metacognitive CQ and leader efficacy. A Pearson correlation coefficient was computed to assess the linear relationship between principals' Metacognitive cultural intelligence and leader efficacy (See Table 3). A Pearson correlation is a number between -1 and +1 that indicates the extent to which two variables have a linear relationship. A score of 0 indicates no relationship between variables. There was a positive correlation between the two variables, $r(22) = .17, p = .432$ and not statistically significant at $\alpha = .05$. The positive relationship indicates that a change in Metacognitive cultural intelligence coincides with the positive change in leader efficacy to a minimal degree. The results led to a decision to reject the null hypothesis.

Table 3. Relationship Between Metacognitive CQ and Leader Efficacy

		Metacognitive CQ	Leader Efficacy
Metacognitive CQ	Pearson Correlation	1	.168
	Sig. (2-tailed)		.432
	N	24	24
Leader Efficacy Score	Pearson Correlation	.168	1
	Sig. (2-tailed)	.432	
	N	24	24

Hypothesis 4

Hypothesis 4, null and alternative, stated that there is no relationship between Behavioral CQ and leader efficacy and there is a relationship between Behavioral CQ and leader efficacy. A Pearson correlation coefficient was computed to assess the linear relationship between principals' Behavioral cultural intelligence and leader efficacy. A Pearson correlation is a number between -1 and +1 that indicates the extent to which two variables have a linear relationship. A score of 0 indicates no relationship between variables. There was a positive correlation between the two variables, $r(22) = .22, p = .292$ and not statistically significant at $\alpha = .05$ (See Table 4). The positive relationship indicates that a change in Behavioral cultural intelligence coincides with the same change in leader efficacy to a minimal degree. The results led to a decision to reject the null hypothesis.

The results of the Pearson r Correlation show that a correlation exists between principals' factors of cultural intelligence and their perceived leadership efficacy. However, the Pearson correlation between the variables revealed no statistically significant relationships.

Table 4. Relationship Between Behavioral CQ and Leader Efficacy

		Behavioral CQ	Leader Efficacy
Behavioral CQ	Pearson Correlation	1	.224
	Sig. (2-tailed)		.292
	N	24	24
Leader Efficacy	Pearson Correlation	.224	1
	Sig. (2-tailed)	.292	
	N	24	24

The analysis did reveal statistically significant relationships between the constructs of cultural intelligence: Cognitive and Metacognitive, Motivational and Behavioral, and Behavioral and Metacognitive (See Table 5). There was a moderate negative relationship between Cognitive and Metacognitive CQ ($r=0.42$, $p=0.04$). The positive relationship indicates that the change in Cognitive CQ coincides with a positive change in Metacognitive CQ and is significant at a .05 level. There was also a moderate negative relationship between Motivation and Behavioral CQ ($r=-0.47$, $p=0.02$). The negative relationship indicates that the change in Motivational CQ coincides with an opposite change in Behavioral CQ and is significant at a .05 level. Lastly, a moderate negative relationship exists between Behavioral and Metacognitive Score ($r=0.43$, $p=0.04$). The negative relationship indicates that the change in Behavioral CQ coincides with an opposite change in Metacognitive CQ and is significant at a .05 level. The Cronbach's Alpha for each of the constructs (See Table 5) indicates the internal consistency of the surveys.

Table 5. Correlation of Cultural Intelligence and Leader Efficacy Data Matrix

	1	2	3	4	5	M	SD	Cronbach's α
1. Motivation CQ	----	0.00	-0.47*	0.17	-0.01	5.91	0.52	0.69
2. Cognitive CQ		-----	-0.14	-.16	0.42*	4.17	0.77	0.87
3. Behavior CQ			-----	0.22	0.43*	4.95	1.22	0.94
4. Leader Efficacy				----	0.17	82.52	6.29	0.79
5. Metacognitive CQ					-----	5.34	0.67	0.82

*. Correlation is significant at the 0.05 level (2-tailed).

Qualitative Results

Selected principals were contacted via email to request their participation in the interview part of the study. Principals selected the date and time for the interview based on their availability. Once the interview participation was confirmed, a calendar invitation was sent to each participant which included the Zoom link for the meeting. Participants received the interview questions and a copy of the informed consent prior to the scheduled virtual Zoom meeting. Participants were informed that the interview was recorded and transcribed verbatim. Prior to the beginning of the interview, participants were asked to read and acknowledge the informed consent. During transcription, participants were assigned pseudonyms for confidentiality. Interviewees were afforded the opportunity to review the contents of the interview after transcription.

The research question asked what the relationship between principals' perceptions of professional development and perceived leadership effectiveness is. Principals' responses revealed their perceptions of the professional development opportunities provided for them during their tenure as a school principal and their preparedness to be effective school leaders. Four themes emerged from responses:

1. Effective culturally responsive school leader
2. Professional development experiences
3. Sufficiency of professional development
4. Impact of professional development on effectiveness

Theme 1: Effective Culturally Responsive School Leader

Theme 1 was generated from principal responses to interview question 2, which was, "Reflecting on your leadership, would you consider yourself an effective culturally responsive leader? Why or why not?" Effective culturally responsive school leadership skills help ensure that teachers and students receive the necessary support to achieve academically and socially within the educational environment. Five of the seven principals interviewed indicated that they viewed themselves as an effective school leader. Prioritizing culturally responsive practices was identified as a key factor of their leadership practice in addition to promoting collaborative dialogue surrounding issues of equity. Principal Clarke stated, "Children live in a very diverse society and that schools, regardless of the demographics of the school, students need to see a level of diversity within the faculty, staff, and administration provide those opportunities for students to experience varied cultures through their administrators, through their teachers, to other adults and faculty staff that they may interact with."

Theme 2: Principals' Professional Development Experiences

Principals' responses to interview question 3, "Have sufficient experiences been provided by the state or school district to support your development as a culturally responsive school leader?" revealed their opinions regarding the issue. Culturally responsive school leaders can develop their capacity to facilitate equity of opportunities and outcomes for all faculty, staff, and students through evidence-based and focused professional learning. Participants acknowledged that varied professional development opportunities were provided by the school district such as book study, mentorship, self-directed study, principal preparation program and professional conferences. Thirty-three percent of the principals noted involvement in a book study. Principal Lewis' book study takeaway was "focus on caring relationships, high expectations and support, commitment to equity, professional accountability for learning and the courage to act on behalf of our students as learning advocates."

Theme 3: Sufficiency of Professional Development

Theme 3 emerged from principals' responses to interview question 4, "What types of professional development experiences have you engaged in to help you become a culturally responsive school leader?". Although all principals acknowledged that professional development opportunities were available, six indicated insufficient offerings to enhance their competencies and skills necessary for effective culturally responsive school leadership. Principal Clarke stated, "In the past, we have talked about, but we have not necessarily done a lot of work at the state level and at the district level to ensure that administrators had training on how to necessarily deal with cultural responsiveness. I think that within our district, we have done a much better job than we have at the state level." When reflecting upon their professional development experiences, Principal Richards stated, "I do not feel that sufficient opportunities have been provided to build trust and establish relationships prior to providing professional development enabling staff to acknowledge, accept, and reflect on their biases and potential consequences for their school."

Themes 4: Impact of Professional Development

Interview question 5 asked principals to describe the impact of professional development experiences on their professional leadership practices. When describing the impact of professional development experiences provided, responses were generally that there was some impact. Principal Forrest indicated that the experiences reinforced what was already known, leading to daily reflection on decision-making. Principal Sloan stated that professional development

"helped me to better understand the effects of implicit bias on decision making as it relates to student learning." Conversely, Principal Richards indicated that after professional development, "We leave the moment and return to our buildings or departments and then real life happens, and all the reflective pieces just kind of go by the wayside." The impact of professional development experiences on knowledge, attitude, and leadership practice revealed from responses indicate that to facilitate effective culturally responsive leadership, district leaders should evaluate learning opportunities provided to improve professional development content focused on culturally responsive leadership practice. Creating systems and structures to build system-wide ownership of culturally responsive school leadership practices requires supporting principals to facilitate a sustainable change. All principals indicated additional support was needed to sustain culturally responsive school leadership practice.

CONCLUSION

As school communities become more diverse, the impetus to create culturally responsive learning environments mandate inclusive decision-making to disrupt existing inequalities. School districts need educational leaders with high cultural intelligence to be successful given today's culturally diverse school communities. Scholars contend that to facilitate change, there must be a conscious shift in thinking to emphasize high expectations for all students grounded in a critical awareness of cultural differences. Prior research supports the notion that culturally responsive school leadership is the ability to guide stakeholders in challenging misconceptions of others from different groups. As such, leaders must lead the learning related to cultural differences to advance academic achievement.

Cultural intelligence enables school administrators to transact purposeful activities toward the acquisition of knowledge and skills needed to facilitate a culturally responsive school environment. School principals should demonstrate suitable attitudes and behaviors to be effective in their collaborations with stakeholders from different cultures to enhance fulfillment in the learning environment. Consequently, the cultural intelligence levels of school principals are important.

Given that cultural intelligence has been shown to facilitate more effective leadership, implications are that cultural intelligence should be an important consideration in selecting, training, and preparing professional development opportunities for school leaders. Additionally, consideration should be given to integrating cultural intelligence into the principal preparation curriculum.

Principals must understand the need and significance of cultural intelligence to incorporate relevant knowledge into decision making and school goals. Furthermore, learning opportunities facilitate an understanding of how other educational opportunities could be a conduit in developing their cultural intelligence.

With regard to principals' perceptions of their preparedness as a culturally responsive school leader, the principal interviews revealed that they were not significantly influenced by exposure to professional development. However, principals were confident in their leadership effectiveness. Research results regarding the implications for school leadership preparation for schoolwide cultural competence suggest a lack of awareness or influence of cultural intelligence.

Effective school leaders are successful when cultivating positive relationships with their stakeholders and peers. In a culturally diverse learning community, understanding goes beyond the superficial comprehension of the spoken word and transcends to awareness of the verbal and nonverbal cues, values, norms, and other important aspects of diverse

cultures. High levels of cultural intelligence can contribute directly to leadership effectiveness.

Culturally intelligent school leaders foster a culturally competent learning community thus creating an inclusive organizational culture that celebrates different cultures. Moreover, cultural intelligence enables school leaders to modify their roles, decision-making, and communication, taking into consideration the cultural differences of stakeholders. Cultural Intelligence creates a framework that promotes acceptance of differences while striving to eliminate conflicts emanating from cultural variances.

REFERENCES

- Alon, I., & Higgins, J. M. (2005). Global leadership success through emotional and cultural intelligences. *Business Horizons*, 48(6), 501-512. <https://doi.org/10.1016/j.bushor.2005.04.003>
- Anast-May, L., Buckner, B., & Greer, G. (2011). Redesigning principal internships: Practicing principals' perspectives. *The International Journal of Educational Leadership Preparation*, 6(1), 1-7. <http://cnx.org/content/m36680/1.3/>
- Ang, S., & Inkpen, A. C. (2008). Cultural intelligence and offshore outsourcing success: A framework of firm-level intercultural capability. *Decision Sciences*, 39(3), 337-358. <https://doi.org/10.1111/j.1540-5915.2008.00195.x>
- Ang, S., & Van Dyne, L. (2008). Conceptualization of cultural intelligence: Definition, distinctiveness, and nomological network. In S. Ang and L. Van Dyne (Eds.), *Handbook of cultural intelligence: Theory, measurement, and applications* (pp. 3-15). M. E. Sharpe.
- Banks, J. A. (2013). The construction and historical development of multicultural education, 1962-2012. *Theory Into Practice*, 52(sup1), 73-82. <https://doi.org/10.1080/00405841.2013.795444>
- Cunningham, W., & Sherman, W. H. (2008). Effective internships: Building bridges between theory and practice. *The Educational Forum*, 72, 308-318. <https://doi.org/10.1080/00131720802361936>
- Dantley, M. E., & Tillman, L. (2010). Social justice and moral transformative leadership. In C. Marshall, & M. Olivia (Eds.), *Leadership for social justice* (pp. 16-30). Pearson.
- Darling-Hammond, L. (2005). Teaching as a profession: Lessons in teacher preparation and professional development. *Phi Delta Kappan*, 87(3), 237-240. <https://doi.org/10.1177/003172170508700318>
- Earley, P. C. & Ang, S. (2003). *Cultural intelligence: Individual interactions across cultures*. Stanford University Press.
- Eken, I., Ozturgut, O., & Craven, A. E. (2014). Leadership styles and cultural intelligence. *Journal of Leadership, Accountability and Ethics*, 11(3), 154-165.
- Gay, G. (2018). *Culturally responsive teaching theory, research, and practice* (3rd ed.). Teacher College Press.
- Genao, S. (2021). Doing it for culturally responsive school leadership: Utilizing reflexivity from preparation to practice. *Journal of Research on Leadership Education*, 16(2), 158-170. <https://doi.org/10.1177%2F19427751211002226>
- Horsford, S. D. (2011). *Learning in a burning house: Educational inequality, ideology, and (dis)integration*. Teachers College Press.
- Jones, B. A., & Nichols, E. J. (2013). *Cultural competence in America's schools: Leadership, engagement and understanding*. Information Age Publishing, Inc.
- Khalifa, M. (2018). *Culturally responsive school leadership*. Harvard Education Press.
- Khalifa, M., Gooden, M. A., & Davis, J. E. (2016). Culturally responsive school leadership: A synthesis of the literature. *Review of Educational Research*, 86(4), 1272-1311. <https://doi.org/10.3102%2F0034654316630383>
- Landa, C. (2011). *Cultural proficiency in education: A review of the literature focused on teachers, school leaders, and schools*. Gastón Institute Publications.
- Lindsey, R. B., Nuri-Robbins, K., Terrell, R., & Lindsey, D. (2019). *Cultural proficiency: A manual for school leaders*. (4th ed.). Cowin.
- Livermore, D. (2015). *Leading with cultural intelligence*. AMAZON.

- McKibben, S. (2013). Do local-level principal preparation programs prevent principal turnover. *The Public Purpose*, 11(11), 69-85.
- Santamaria, L. J., Santamaria, A. P., Webber, M., & Pearson, H. (2014). Indigenous urban school leadership: A critical cross-cultural comparative analysis of educational leaders in New Zealand and the United States. *Canadian and International Education*, 43(1), 1-20. <https://doi.org/10.5206/cie-eci.v43i1.9240>
- Skria, L., Scheurich, J. J., Garcia, J., & Nolly, G. (2004). Equity audits: A practical leadership tool for developing equitable and excellent schools. *Educational Administration Quarterly*, 40(1), 133-161. <https://doi.org/10.1177%2F0013161X03259148>
- Stone-Johnson, C., & Patrizio, K. (2014). Learning to Lead Public Schools. *Journal of Inquiry and Action in Education*, 5(3). Retrieved from <https://digitalcommons.buffalostate.edu/jiae/vol5/iss3/2>
- Superville, D. R. (2017). Pressure mounts on higher ed. to improve principal preparation: States and universities are under pressure to revamp how principals are trained for the profession. *Education Week*, 36(19), 12-15.
- The Wallace Foundation. (2012). *The making of the principal: Five lessons in leadership training*.
- U.S. Department of Education. (2016). *The state of racial diversity in the educator workforce*. Office of Planning, Evaluation and Policy Development. Policy and Program Studies Service.
- Van Dyne, V., Ang, S., & Koh, C. (2015). Development and validation of the CQS: The cultural intelligence scale. In S. Ang and L. Van Dyne (Eds.), *Handbook of cultural intelligence: Theory, measurement, and applications* (pp. 16-38). Routledge.
- Young, B. L., Madsen, J., & Young, M. A. (2010). Implementing diversity plans: Principals' preparation of their ability to address diversity in their schools. *NASSP Bulletin*, 94, 135-157.
- Yukl, G. (2013). Effective leadership behavior: What we know and what questions need more attention. *Academy of Management perspectives*, 26(4), 66-85. <https://doi.org/10.5465/amp.2012.0088>