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### Instructional Leadership Practices and School Leaders' Self-Efficacy

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2020

## Instructional Leadership Practices and School Leaders' Self-Efficacy

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## INSTRUCTIONAL LEADERSHIP PRACTICES AND SCHOOL LEADERS' SELF-EFFICACY

### ABSTRACT

The purpose of this quantitative study was to investigate instructional leadership practices and the degree to which these practices predict the leadership self-efficacy of school leaders while controlling for years of experience as a school leader. With educational reform focused on school accountability, principals must attend to tasks that lead to school improvement. Identifying such tasks as instructional leadership practices and gaining a more comprehensive understanding of instructional leadership practices through leadership self-efficacy may contribute to school improvement. The methodology utilized a survey and the participants were 100 principals and assistant principals of public schools in the southeastern United States, spanning 18 school districts and 180 schools. The findings revealed that supervising and evaluating instruction and monitoring student progress were significant positive predictors of leadership self-efficacy for the entire sample of respondents whereas coordinating curriculum was only approaching significance. This pattern shifted, however, when the sample was divided between principals and assistant principals. For practical implications, educational leaders and key constituents may consider these results for reflection on practice as well as planning professional learning for skill development to attain school improvement. Recommendations for future research include expansion of the population to include participants in other locations as well as the inclusion of additional instructional leadership practices.

**KEY WORDS:** *instructional leadership practices, leadership self-efficacy, school improvement, professional learning, principals, assistant principals*

## **INSTRUCTIONAL LEADERSHIP PRACTICES AND SCHOOL LEADERS' SELF-EFFICACY**

Leadership determines the success and significance of an organization and is a key component of school improvement (Maxwell, 1993; Goolamally & Ahmad, 2014). With school improvement as a primary responsibility of principals and shared by assistant principals, identifying and understanding instructional leadership practices that lead to school improvement is paramount. Additionally, a school leader needs to not only be aware of their impact through instructional leadership practices but also be engaged in self-reflection to better understand their own instructional leadership practices. School principals are the leaders who impact the direction of schools through their thinking, practices, and relationships reiterating the idea of leaders thinking in the long term, looking outside as well as inside, in an effort to influence constituents is vital (Bolman & Deal, 2013).

Common strategies of principals within schools classified as effective and successful include noting examination of assessment results, work driven by clear morals and ethical values, respect and trust of and among staff and parents, varied learning opportunities, and use of data as related strategies of instructional leadership practices (Day, Gu, & Sammons, 2016). Additionally, successful principals are those with qualities of intuition, knowledge, and strategy with practices that promote cultures of learning, engagement, and increased student achievement. Successful school principals impact student outcomes through an interactive process dependent upon core values and beliefs (Mulford & Silins, 2011). Furthermore, outcomes related to academic achievement, social development, and student empowerment were found to be factors influenced by principal leadership as well as evaluation, capacity building, and student social skill development served as common factors in successful schools.

Thus, understanding instructional leadership practices and their predictability of leadership self-efficacy warrants further research. The goal of this study was to identify strengths and areas for improvement in regard to instructional leadership practices for the purposes of school leader skill development and professional learning to attain school improvement. The overarching question guiding this study was: To what degree are instructional leadership practices of school leaders predictive of leadership self-efficacy while controlling for years of experience as a school leader? More specifically, the study examined the relationship between instructional leadership practices and self-efficacy with the following sub-questions: 1) To what degree are instructional leadership practices of school leaders related to supervising instruction, coordinating curriculum, and monitoring student progress predictive of leadership self-efficacy?; 2) Are these relational patterns consistent or different between principals and assistant principals?; and 3) What differences exist in the leadership self-efficacy of principals and assistant principals?

Through these questions, the researchers examined leadership self-efficacy, instructional leadership practices, and the differences between the leadership self-efficacy of school leaders serving as principals and assistant principals. Findings from this study were intended to reveal the degree to which leadership self-efficacy is predicted by the instructional leadership practices of school leaders. Additionally, findings from this study compared the leadership self-efficacy of school leaders (both principals and assistant principals) to their instructional leadership practices. These findings may inform professional learning development to assist school leaders in growing their instructional leadership practices for school improvement.

### **Review of Literature**

To fully understand the relationship between instructional leadership practices and self-efficacy, the researchers examined the literature on instructional leadership, the principal and assistant principal roles in regard to instructional leadership, self-efficacy, school improvement, measurement of self-efficacy and instructional leadership, and professional learning. Reviewing these concepts related to the instructional leadership practices of school leaders highlighted how such practices predict leadership self-efficacy and provided a better understanding of what a school leader needs when working toward school improvement.

### **Instructional Leadership**

Instructional leadership was the theoretical framework that guided this study. In a seminal study, Hallinger and Murphy (1985) presented one of the earliest highlights of instructional leadership as the core responsibilities of principals that impact student learning. This idea has evolved over time and is noted as a process to influence leaders in identifying a purpose for the school, support staff motivation, and coordinate evidence-based practices to positively impact teaching and learning (Hallinger & Murphy, 2013). Furthermore, instructional leadership can be categorized by three dimensions of Defining the School Mission, Managing the Instructional Program, and Promoting a Positive Learning Climate.

Instructional leadership practices when compared to successful leadership involve setting a direction, developing people, and designing the organization, which provides significant contributions to student learning (Leithwood, Louis, Anderson, & Wahlstrom, 2004).

Instructional leadership practices focused staff on teaching and learning, inspired teacher belief in the achievement of all students, built teacher capacity and commitment to change, provided practical assistance in developing faculty knowledge and instructional skills, and created school conditions for teacher potential to meet the needs of all students (Hallinger, Hosseingholizadeh,

Hashemi, & Kouhsari, 2018). Additionally, instructional leadership, principal self-efficacy, and collective teacher efficacy were found to have statistically significant relationships as practices within a school that can be changed to potentially raise student learning and lead to school improvement. Instructional leadership practices influenced a school's climate when impacting the attitudes of students and staff through achievement recognition, clear expectations, value of time, and professional learning (Hallinger & Murphy, 1985). Viewing principal decisions and actions through a theoretical framework of instructional leadership practices related to the seminal work of Hallinger and Murphy (1985), specifically the dimensions of the instructional leadership framework was the focus of this study.

### **The Principal and Assistant Principal as Instructional Leaders**

School principals are the leaders who impact the direction of schools through their decision-making, engaging of instructional and managerial practices, and building relationships. Multiple studies have revealed the positive connection principals have to impact the instructional programs of schools (Hallinger & Murphy, 1985; Goolamally & Ahmad, 2014). Principals, by title and position, serve as the individuals who provide direction, influence, and support to teachers, staff, and students, and many often consider principals the primary leaders of their schools. Yet, a principal is not the sole influencer of a school. In fact, the idea of instructional leadership extends to others like teacher leaders, instructional coaches, and assistant principals. Principals cannot accomplish the full task of school leadership alone, and the presence and support from individuals such as assistant principals enable principals to meet school improvement goals through shared instructional leadership practices (Mercer, 2016).

## **Self-Efficacy**

Self-efficacy, or a belief in one's abilities, initially emerged in the seminal research of Bandura (1977). Through human behavioral theory, Bandura (1977) researched self-efficacy and defined it as "the strength of people's convictions in their own effectiveness" (p. 193). Self-efficacy derives from four sources of information of one's perceived expectations to include performance accomplishments, vicarious experience, verbal persuasion, and emotional arousal (Bandura, 1977). Further research of Bandura's seminal study has modernized and enriched the definition of self-efficacy, connecting it to tasks, performance, and confidence (Hattie, 2012; Hattie & Yates, 2014; Kelleher, 2016; McCormick, Tanguma, & Lopez-Forment, 2002; Murphy & Johnson, 2016).

Leadership self-efficacy is a more specific strand of self-efficacy. In a recent study, leadership self-efficacy was defined as "self-assessment of one's perceived capability to organize and implement action required to effectively lead organizational change to achieve a performance outcome" (McBrayer, Jackson, Pannell, Sorgen, Gutierrez de Blume, & Melton 2018, p. 603). Leadership self-efficacy is connected to successful and effective organizations and effective schools (Goolamally & Ahmad, 2014; Kelleher, 2016; McCormick et al., 2002; Murphy & Johnson, 2016). Self-efficacy and leadership self-efficacy need to extend to the educational arena when reviewing the relationship between self-efficacy and school leaders to better understand outcomes impacting school improvement (Cobonaglu & Yurek, 2018; DeWitt, 2017; Duran & Yildirim, 2017; Kelleher, 2016; Versland & Erickson, 2017).

Understanding one's self-efficacy requires a process of self-reflection in an effort to reveal one's self-perceptions, which in turn may yield outcomes to influence changes in behavior. In addressing leaders, Maxwell (2014) stated, "If you want to grow your potential, you



must know yourself, your strengths and weaknesses, your interests and opportunities” (p. 9). Pannell, White, and McBrayer (2018) noted after the identification of a gap or weakness, a person’s *locus of attention* would change to either the self, the specific task, or the components of the task, and that people act on that which their attention is focused. The authors contended attention as essential to attaining goals and asserted people tend to focus attention and effort towards activities that would help them to attain their goals and away from activities that would not help. Providing principals ways to reflect upon their instructional leadership practices not only aided in identifying such practices but also potentially enhanced their confidence and frequency in following those practices. In turn, this insight is intended to assist principals and assistant principals with the task of improving schools. Therefore, engaging school leaders in a study of their leadership practices created a mechanism for principals and assistant principals to reflect upon their decision-making and practices.

### **School Improvement**

Central to the idea of education is evaluation in schools. In the United States, significant change occurred in education through the authorization of The Elementary and Secondary Education Act (ESEA) of 1965, the 2001 No Child Left Behind Act (NCLB), and the 2015 Every Student Succeeds Act (ESSA). With each passage, the focus on school accountability increased as the importance of improved student achievement elevated in public expectation. At the state level the impact of these federal education mandates requires a focus on school accountability related to student achievement. Thus, districts and schools are required to analyze factors that influence student achievement by embarking upon self-reflection to examine the actions and practices of those individuals impacting achievement in an effort to contribute to school improvement.

Improvements in student achievement and school environment can be viewed in the all-encompassing term of school improvement, and for the purposes of this study, school improvement leadership is defined as “an influence process through which leaders identify a direction for the school, motivate staff, and coordinate an evolving set of strategies toward improvements in teaching and learning” (Heck & Hallinger, 2009, p. 662). Leadership is a key component of school improvement as a principal is the primary leader of the school, and their decisions and actions are directly connected to school improvement. A principal’s knowledge of or engagement in principal instructional leadership practices influences the outcome of student achievement leading to school improvement. Principals need to not only be aware of their impact but also engage in self-reflection to understand their own principal instructional leadership practices, leadership self-efficacy, and influence of their practices on school outcomes. Lastly, principals need to maintain a focus on instructional leadership by distributing both instructional and managerial tasks to support staff such as assistant principals to ensure the work is completed with fidelity as well as remains balanced between these complimentary roles (McBrayer et al., 2018).

### **Measurement: Principal Instructional Management Rating Scale (PIMRS)**

Engaging individuals in self-reflection necessitated measurement instruments that specifically review instructional leadership practices and self-efficacy. Hallinger and Murphy (1985) used the Principal Instructional Management Rating Scale (PIMRS) as a tool to assess instructional leadership. The survey is composed of 71 behavior statements related to instructional leadership. The behavioral statements are further organized into 11 categories: Framing the School Goals; Communicating the School Goals; Supervising and Evaluating Instruction; Coordinating the Curriculum; Monitoring Student Progress; Protecting Instructional Time; Maintaining High

Visibility; Providing Incentives for Teachers; Promoting Professional Development; Developing and Enforcing Academic Standards; and Providing Incentives for Learning.

### **Measurement: School Leaders' Self-Efficacy Scale (SLSES)**

Petridou, Nicolaidou, and Williams (2014) composed the School Leaders' Self-Efficacy Scale (SLSES) as an instrument to measure the self-efficacy of school leaders and acknowledged its ongoing validation. The survey is composed of 31 statements related to school leadership and self-efficacy and is divided into eight factors or categories: Creating an Appropriate Structure; Leading and Managing the Learning Organization; School Self-Evaluation for School Improvement; Developing a Positive Climate – Managing Conflicts; Evaluating Classroom Practices; Adhering to Community and Policy Demands; Monitoring Learning; and Leadership of Continuous Professional Development – Developing Others.

### **Professional Learning**

Serving as the primary leader of a school, a principal has been found to determine the practices and impact of professional learning (Hallinger & Murphy, 1985). As a principal engages in professional learning, they set the direction and engagement in school and teacher professional learning opportunities. Not only is learning important to leaders, but multiple studies demonstrated the importance of principal instructional leadership practices connected to professional learning (Blase & Blase, 1999; Hallinger & Murphy, 1985; Leithwood et al., 2004). A principal serves as the leader of a school, exercising leadership through their instructional leadership practices. With school improvement as a primary responsibility of principals, identifying and understanding instructional leadership practices and implementing aligned professional learning that lead to school improvement is paramount.

As accountability of schools continues to increase, school improvement jumps to the forefront of practice with school leaders, revealing a need to improve teaching and learning practices that impact learning outcomes and school improvement. Identifying such tasks as instructional leadership practices allowed principals to align their tasks to those that enhance school improvement. A measure of self-efficacy helped determine how a principal perceives their influence on school improvement through their instructional leadership practices. Gaining a more comprehensive understanding of instructional leadership practices through leadership self-efficacy assists principals in identifying areas of strength and areas for improvement and provides guidance in seeking professional learning opportunities to develop instructional practices intended to attain school improvement.

Considering these accountability needs, this study sought to identify and measure the instructional leadership practices of school leaders as well as the leadership self-efficacy of their instructional leadership practices while controlling for years of experience as a school leader. Likewise, this study intended to identify the strengths of school leaders including both principals and assistant principals as well as areas of improvement for the ultimate purpose of advancing professional practice and elevating school improvement.

### **Methodology**

The purpose of this quantitative study was to investigate instructional leadership practices and the degree to which these practices predict the leadership self-efficacy of school leaders. Based on findings from the literature, two surveys were adapted to measure leadership self-efficacy and the instructional leadership practices of school leaders. First, Petridou et al., (2014) developed the School Leaders' Self-Efficacy Scale (SLSES), which measures leadership self-efficacy of school leaders. Second, Hallinger and Murphy (1985) created the Principal Instructional

Management Rating Scale (PIMRS) to assess principal practices related to instructional leadership. A specified portion of this latter survey was utilized to measure instructional leadership practices, specifically focusing on Managing the Instructional Program (see Table 3 for internal consistency reliability coefficients, Cronbach's alphas, for the various scales employed in this study).

### **Research Design**

The intent of this study was to explore leadership self-efficacy as predicted by the instructional leadership practices of school leaders. This study employed a cross-sectional survey methodology to examine leadership self-efficacy and the instructional leadership practices of school leaders. By inviting principals and assistant principals to respond to a survey of their instructional leadership practices and leadership self-efficacy, this study intended to gather data from one group at one point in time (Creswell & Creswell, 2018). The researchers utilized descriptive statistics (mean, variance, and range) and inferential statistics (ordinary least squares regression, *t*-test) to examine the degree to which instructional leadership practices of school leaders predict leadership self-efficacy and to evaluate group differences between principals and assistant principals.

### **Participants**

Participants in this survey were selected based on their school leadership assignments in public schools in the southeastern United States. The researchers utilized convenience sampling according to the role of the researchers and access to participants (Creswell & Creswell, 2018). Principals and assistant principals in 180 schools in 18 school systems located in the southeastern United States were the population for this study.

Of the 100 respondents to the survey, 52% were principals, and 48% were assistant principals, with 64 of them identifying as female (36 as male). Participants noted their current work setting or school level in the following categories: 43% answered as serving in the PreKindergarten or Elementary (grades P – 5) setting, 24% as Middle (grades 6 – 8) setting, 30% as High (grades 9 – 12) setting, and 3% as Other (combination or special program not listed). Responses revealed that 14% held a Masters, 55% held an Education Specialist, and 31% held a Doctorate, with the average years of experience as a school leader being 6.19 years ( $SD = 6.09$ ; range: 0.5 year to 39 years).

### **Instrumentation**

The survey instrumentation selected for this research was a modified instrument composed of three sections. The first section of the survey consisted of demographic questions including role (principal or assistant principal), work setting, years of experience in the role, gender, and level of education.

The second section of the survey assessed the instructional leadership practices of school leaders using Hallinger and Murphy's (1985) Principal Instructional Management Rating Scale (PIMRS). In the second section of the survey, Hallinger and Murphy's (1985) Principal Instructional Management Rating Scale (PIMRS) was utilized to assess the instructional leadership practices of school leaders. With this survey, individuals responded to 71 behavior statements regarding instructional leadership. These behavioral statements were organized into 11 categories. However, for the purposes of this study, participants responded only to three identified sections of the PIMRS related to the specified dimension of Managing the Instructional Program within the instructional leadership framework of Hallinger and Murphy (1985), which included Supervising and Evaluating Instruction, Coordinating Curriculum, and

Monitoring Student Progress. Having participants respond only to these three sections of the scale simplified the survey to encourage more participation by focusing responses and results to answer specific research questions relevant to this study about instructional leadership practices. In this abbreviated version, participants responded to the selected 26 items using the following 5-point Likert scale: 1 = *Almost Never*, 2 = *Seldom*, 3 = *Sometimes*, 4 = *Frequently*, and 5 = *Almost Always*.

The third section of the survey assessed leadership self-efficacy of school leaders with the School Leaders' Self-Efficacy Scale (SLSES; Petridou et al., 2014). The SLSES was used to measure leadership self-efficacy. Participants responded to this survey as a means of reflection upon their leadership capabilities, functions, and efficacy. The survey was composed of 31 statements related to school leadership and self-efficacy organized by eight factors. Participants responded to all 31 items using the following 5-point Likert scale: 1 = *Not at all Confident*, 2 = *Not Confident*, 3 = *Somewhat Confident*, 4 = *Confident*, and 5 = *Very Confident*. While the survey captured the responses of participants' self-efficacy within these eight domains, the survey generated one overall self-efficacy score. The overall self-efficacy score was viewed as an individual's leadership self-efficacy and analyzed as a composite measure of school leaders' instructional leadership practices.

### **Procedures**

Prior to contacting potential participants and administering the survey, the researchers received permission from the school district Institutional Review Board (IRB) and the research institution IRB. Contact with potential participants occurred through email as the survey was distributed electronically and on a one-time basis. Creswell and Creswell (2018) suggested a four-part survey request to include an advance notice alerting potential participants of the survey, a notice

requesting participation in the survey, a follow-up notice approximately one week after the survey notice, and personalized contact to all non-respondents approximately three weeks after the survey notice. Considering these recommendations, and to obtain a high rate of response, the researchers followed a four-part invitation to the survey over a four-week period. First, the researchers sent a recruitment and advance information email to all potential participants explaining the details of the study and confirming correct contact information.

Second, and one week following the recruitment and advance information email, the researchers sent an invitation to survey email to all participants requesting their participation in the survey. The invitation to survey email indicated the purpose and significance of the research, anonymity assurance, implied consent, and a link to the survey using Qualtrics™. The invitation to survey email clearly addressed that the survey was anonymous, of voluntary nature, and that no participant would be identified. In addition, the invitation to survey email outlined the rights of the participant, including the right to opt out of the survey after having started their responses and the right to skip over questions during the survey. As a third contact and one week following the invitation to the survey email, the researchers sent a reminder and follow up email reminding potential participants of the survey. The researchers made a fourth contact one week later as an additional reminder.

### **Data Analysis**

The researchers used a combination of descriptive and inferential statistics to examine the degree to which instructional leadership practices of school leaders predict leadership self-efficacy while controlling for years of experience as a school leader. The overarching and first two research questions were answered by conducting a series of ordinary least squares regression (hierarchical), with years of experience as a school leader entered in the first block as a covariate,



Supervising Instruction, Coordinating Curriculum, and Monitoring Student Progress entered in the second block as actual predictors of interest, and leadership self-efficacy serving as the criterion. This process was repeated for the second question by splitting the data file into two groups, one for principals and one for assistant principals to ascertain consistency or inconsistency in relational patterns between the two groups. The third research question was answered by conducting an independent samples *t*-test, with administrator type (principal and assistant principal) serving as the independent variable and self-efficacy serving as the dependent variable. The squared multiple correlation coefficient,  $R^2$ , was used as the measure of effect for regression and Cohen's *d* for the *t*-test. Cohen (1988) provided the following interpretive guidelines for  $R^2$ : .01-.24 as small; .25-.49 as medium; and  $\geq .50$  as large; for *d*: .010-.499 as small; .500-.799 as medium; and  $\geq .800$  as large.

The researchers presented demographic information of participants, including respondents and non-respondents and addressed response bias (Creswell & Creswell, 2018). Data related to instructional leadership practices from the PIMRS and data related to self-efficacy from the SLSES were presented with total scale scores in tables for each instrument addressing each sub-section of the survey. The inclusion of descriptive statistics provided more information regarding the survey participants, their instructional leadership practices and leadership self-efficacy, and how their instructional leadership practices predict their leadership self-efficacy.

### **Findings**

Table 1 outlines the correlation matrix of instructional leadership practices and leadership self-efficacy for the entire sample, both principals and assistant principals.

Table 1

*Zero-Order Correlation Matrix of PIMRS Supervising and Evaluating Instruction, PIMRS Coordinating Curriculum, PIMRS Monitoring Student Progress, and SLSES for the Sample*

Variable	1	2	3	4
1. Supervising and Evaluating Instruction†	-	.49**	.30**	.53**
2. Coordinating Curriculum†		-	.74**	.62**
3. Monitoring Student Progress†			-	.58**
4. SLSES				-

$N = 100$

† Subscales of the PIMRS

Table 2 outlines a correlation matrix of instructional leadership practices and leadership self-efficacy for the separate groups of principals and assistant principals.

Table 2

*Zero-Order Correlation Matrix of PIMRS Supervising and Evaluating Instruction, PIMRS Coordinating Curriculum, PIMRS Monitoring Student Progress, and SLSES by Group*

Variable	1	2	3	4
1. Supervising and Evaluating Instruction†	-	.58**	.58**	.66**
2. Coordinating Curriculum†	.46**	-	.75**	.59**
3. Monitoring Student Progress†	.04	.69**	-	.57**
4. SLSES	.32*	.64**	.56**	-

*Note.* Correlations above the diagonal are for principals and those below the diagonal are for assistant principals.

$N = 100$

\*\* - Correlation is significant at the 0.01 level (1 – tailed).

\* - Correlation is significant at the 0.05 level (1 – tailed).

### **Hierarchical Linear Regression for the Entire Sample**

Results revealed that the combined predictors statistically significantly positively predicted leadership self-efficacy,  $F(4, 79) = 19.651, p < .001, R^2 = .499$ . Years of experience serving as a school leader ( $b = .016$  [CI<sub>95%</sub> =  $-.001, .034$ ],  $p = .063$ ;  $\beta = .204$ ) provided 4.1% of unique variance to the prediction of leadership self-efficacy, albeit this was only approaching statistical significance,  $\Delta F(1, 82) = 3.548, \Delta p = .063, \Delta R^2 = .041$ . After controlling for years of experience serving as a school leader, the combined instructional leadership practices provided 45.7% of incremental variance to the prediction of leadership self-efficacy,  $\Delta F(3, 79) = 24.023, \Delta p < .001, \Delta R^2 = .457$ . However, only Supervising and Evaluating Instruction ( $b = .331$  [CI<sub>95%</sub> =  $.149, .513$ ],  $p = .001$ ;  $\beta = .329$ ) and Monitoring Student Progress ( $b = .212$  [CI<sub>95%</sub> =  $.040, .385$ ],  $p = .017$ ;  $\beta = .286$ ) significantly positively predicted leadership self-efficacy whereas Coordinating

Curriculum was only approaching significance ( $b = .189$  [ $CI_{95\%} = -.015, .392$ ],  $p = .068$ ;  $\beta = .235$ ).

### **Hierarchical Linear Regressions by Group**

*Principals.* Findings of the principal group only suggested that the combined predictors significantly positively predicted leadership self-efficacy,  $F(4,39) = 11.045$ ,  $p < .001$ ,  $R^2 = .531$ . Years of experience serving as a school leader ( $b = .029$  [ $CI_{95\%} = .001, .058$ ],  $p = .046$ ;  $\beta = .302$ ) provided 9.1% of unique variance to the prediction of leadership self-efficacy,  $\Delta F(1,42) = 4.229$ ,  $\Delta p = .046$ ,  $\Delta R^2 = .091$ . After controlling for years of experience serving as a school leader, the combined instructional leadership practices provided 44% of incremental variance to the prediction of leadership self-efficacy,  $\Delta F(3,39) = 12.190$ ,  $\Delta p < .001$ ,  $\Delta R^2 = .440$ . However, only Supervising and Evaluating Instruction ( $b = .399$  [ $CI_{95\%} = .124, .674$ ],  $p = .006$ ;  $\beta = .413$ ) significantly positively predicted leadership self-efficacy whereas Monitoring Student Progress ( $b = .114$  [ $CI_{95\%} = -.214, .441$ ],  $p = .485$ ;  $\beta = .118$ ) and Coordinating Curriculum ( $b = .286$  [ $CI_{95\%} = -.092, .664$ ],  $p = .133$ ;  $\beta = .256$ ) were not significant predictors for principals.

*Assistant Principals.* Results for the assistant principal group demonstrated that the combined predictors statistically significantly positively predicted leadership self-efficacy,  $F(4,35) = 7.062$ ,  $p < .001$ ,  $R^2 = .447$ . Years of experience serving as a school leader ( $b = .009$  [ $CI_{95\%} = -.013, .030$ ],  $p = .412$ ;  $\beta = .132$ ) provided only 1.7% of unique variance to the prediction of leadership self-efficacy for assistant principals, albeit this was not statistically significant,  $\Delta F(1,38) = 0.675$ ,  $\Delta p = .417$ ,  $\Delta R^2 = .017$ . After controlling for years of experience serving as a school leader, the combined instructional leadership practices provided 42.9% of incremental variance to the prediction of leadership self-efficacy for assistant principals,  $\Delta F(3,35) = 9.048$ ,  $\Delta p < .001$ ,  $\Delta R^2 = .429$ . However, unlike the entire sample and the principals group, only

Coordinating Curriculum ( $b = .244$  [ $CI_{95\%} = .040, .527$ ],  $p = .021$ ;  $\beta = .376$ ) significantly positively predicted leadership self-efficacy for assistant principals whereas Monitoring Student Progress ( $b = .181$  [ $CI_{95\%} = -.067, .428$ ],  $p = .147$ ;  $\beta = .217$ ) and Supervising and Evaluating Instruction ( $b = .155$  [ $CI_{95\%} = -.178, .489$ ],  $p = .352$ ;  $\beta = .149$ ) were not significant predictors.

### **Summary of Predictions**

Our results indicated that the relational pattern between the entire sample, principals, and assistant principals regarding the three instructional leadership practices measures and leadership self-efficacy varied as a function of role. Thus, even though analysis of the entire sample provides insightful information and additional statistical power, our findings reveal that this also masks predictive patterns that are unique to each role. Whereas Supervising and Evaluating Instruction and Monitoring Student Progress were significant positive predictors of leadership self-efficacy for the entire sample, only Supervising and Evaluating Instruction was a significant predictor for principals and only Coordinating Curriculum was a significant predictor for assistant principals. These differences in relational patterns should be informative in elucidating differences between the principal and assistant principal roles.

### **Independent Samples t-test between Groups**

Leadership self-efficacy of school leaders was a significant part of this study. Therefore, third sub-question was: What differences exist in the leadership self-efficacy of principals and assistant principals? Table 3 presents the self-efficacy scores for principals and assistant principals as well as for the subscales scores for PIMRS.

Table 3

*Descriptive Statistics and Internal Consistency Reliability Coefficients for the Subscales of the PIMRS and the SLSES*

Variables	Principals		Assistant Principals		$\alpha$
	(n=52)		(n=48)		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Supervising and Evaluating	4.16	.56	4.10	.46	.87
Instruction†					
Coordinating Curriculum†	4.24	.48	3.85	.69	.84
Monitoring Student Progress†	4.14	.54	3.69	.72	.86
SLSES	4.28	.54	4.04	.47	.97

$N = 88$

† Subscales of the PIMRS out of a total of 5 points.

The results of the analysis demonstrated that there were statistically significant differences in the leadership self-efficacy of principals and assistant principals,  $t = 2.165$ ,  $p = .033$ , *Cohen's d* = 0.465, suggesting a small-approaching-medium effect size (See Table 3 for means and standard deviations by group).

### Discussion

Findings from this study are intended to add to the existing body of research to fill the gap as related to instructional leadership practices and leadership self-efficacy. The findings compare to those of previous studies and also reveal additional findings contributing to the discussion of instructional leadership practices and leadership self-efficacy. As noted in the literature review, Bandura (1977) defined self-efficacy as “the strength of people’s convictions in their own effectiveness” (p. 193) as well as performance accomplishments. This study examined

accomplishments of school leaders and went one step further and examined a more specific strand of self-efficacy, leadership self-efficacy, defined as “self-assessment of one’s perceived capability to organize and implement action required to effectively lead organizational change to achieve a performance outcome” (McBrayer et al., 2018, p. 603). Therefore, this study had school leaders self-assess their instructional leadership practices and leadership self-efficacy to determine the degree instructional leadership practices predict their leadership self-efficacy. In effect, this study helped identify how well school leaders felt they performed in their job with instructional leadership practices. Challenging on-the-job experiences and in the case of this study, instructional leadership tasks have been identified to support leadership capacity to better understand leaders’ belief in their ability to perform successfully in a leadership role (Seibert, Sargent, Kraimer, & Kiazad, 2015). “In addition, self-efficacy acts as a motivational mechanism, enhancing effort, persistence in the face of obstacles, and the willingness to take on new and more challenging leadership tasks and responsibilities” (Seibert et al., 2015, p. 384), which is often the outcome as school leaders perform their instructional duties.

Responses from the full sample of school leaders revealed a different portrait from analyses by each role separately. More specifically, whereas the supervision and evaluation of instruction and student progress monitoring were significant positive predictors of leadership self-efficacy for the entire sample of school leaders, only supervising and evaluating instruction was a significant predictor for principals and only coordinating curriculum was a significant predictor for assistant principals. This may have occurred based on how the principal agreed to share instructional leadership responsibilities with their assistant principal with the principal more focused on evaluation and assistant principals being more involved with the development of curriculum. Additionally, there were statistically significant differences in the leadership self-

efficacy of principals and assistant principals, with principals reporting significantly higher levels of leadership self-efficacy compared to assistant principals. This may be due to the distribution of instructional tasks versus those considered more managerial. “Principals should advocate for professional development opportunities that provide tools and leadership skills necessary to balance their responsibilities and advocate for additional administrators and support personnel (assistant principals and instructional staff) to help distribute the leadership of these tasks and responsibilities” (McBrayer et al., 2018, p. 609).

Specifically, aligning with existing principal leadership self-efficacy research, these findings showed school principals feel they are effective in their instructional leadership practices related to the evaluation and supervision and student progress monitoring. For example, leadership self-efficacy is connected to principals and linked to principal leadership efforts related to effective leadership and schools, school structure, and instruction (Kelleher, 2016). Principal self-efficacy and instructional leadership have a strong relationship and potential impact to student learning and school improvement (Hallinger et al., 2018). Likewise, belief and values of leaders, school improvement, principal instructional leadership, and leader self-efficacy are also connected (Hallinger et al., 2018). In addition, modest to moderate connection exists between leader self-efficacy, leadership practices, and classroom and school conditions (Leithwood & Jantzi, 2008). Additionally, principal self-efficacy is linked to leadership efforts that influence teacher attitudes and behaviors as well as student achievement and the influence of instructional leadership on teacher self-efficacy and professional learning (Liu & Hallinger, 2018).

Existing research highlights the leadership self-efficacy of principals yet not specifically including individuals identifying as assistant principals. While principals, by title and position,



serve as the individuals who provide the direction, influence, and support to the teachers, staff, and students, may often be considered the primary leaders of their schools, principals are not the sole influencers. Assistant principals share this role, and according to Mercer (2016) “are individuals that are close to the heart of instruction in most schools and affect a lot of change and assert a lot of grass roots leadership” (p. 89). A recent study suggested that re-envisioning the role of the assistant principal to share the leadership tasks of assistant principals may positively impact school achievement as assistant principals’ desire to attain more instructional leadership responsibilities (McBrayer et al., 2018).

School leaders could use the findings of this study to support the enhancement of assistant principals’ administrative skills by providing more opportunities for assistant principals to learn about and use both school instructional leadership and management skills to share administrative leadership responsibilities. Therefore, investigating the differences in the leadership self-efficacy between principals and assistant principals fills a gap in research literature. Perhaps not surprisingly, the results from this study revealed statistically significant differences in the leadership self-efficacy of principals and assistant principals. Interestingly, whereas the coordination of the curriculum was not a statistically significant predictor for principals, it proved critically linked to assistant principals’ self-efficacy in this study. Clearly, future research is warranted.

### **Implications for Practice**

This study provided valuable information regarding instructional leadership practices of school leaders and their leadership self-efficacy. District and school leaders, state entities, and corresponding policy makers may consider this information for reflection on practice as well as the planning of professional learning for school leader skill development to attain school

improvement. Results demonstrated instructional leadership practices of school leaders, specifically those related to managing instruction as well as the supervision and evaluation of instruction, coordinating curriculum, and monitoring student progress were predictors of leadership self-efficacy of school leaders. Yet, when reviewing the functions of managing instruction separately, some differences were evident, particularly in coordinating curriculum, which was not a statistically significant predictor for principals, but was for assistant principals. Additionally, research results revealed differences in the leadership self-efficacy of principals as compared to assistant principals.

With the instructional leadership practice of supervision and evaluation of instruction, this study revealed a significantly positive prediction to principals' leadership self-efficacy. The researchers support the notion that this instructional leadership practice can be considered a standard practice of school leaders. Within a framework of instructional leadership, Hallinger and Murphy (1985) described the function of supervising and evaluating the instruction to include how principals provide instructional support to teachers through feedback regarding classroom visits specifically related to "school goals translated to classroom practice" (p. 222). The instructional leadership task of instructional supervision and evaluation is heavily evident within the observation and evaluation practices of school leaders within the study as potentially related to the statewide evaluation system. With the comprehensive and monitored structure of statewide evaluation systems, school leaders have a method to supervise and evaluate instruction, thus connecting its positive prediction of this specific instructional leadership practice with leadership self-efficacy. Furthermore, school leaders are confident and feel effective in their abilities related to supervision and evaluation, which may likely be attributed to the specific expectations and accountability set forth within the statewide evaluation system guidelines.

With the instructional leadership practice of monitoring student progress, this study revealed a significantly positive prediction to principals' leadership self-efficacy. The researchers also support the notion that this instructional leadership practice too can be considered a standard practice of school leaders. Within a framework of instructional leadership, Hallinger and Murphy (1985) identified a function of the management of instruction as monitoring student progress and referenced the importance to focus on both standardized and criterion-referenced assessments employed "to diagnose programmatic and student weaknesses, to evaluate the results of changes in the school's instructional program, and to make classroom assignments" (p. 222).

The researchers furthered this idea to share how principals inform teachers of test data and analysis for comparison to and direction of school goals. The importance of this instructional leadership task is a clear focus with school's accountability measures. Data reflected within these measures holds schools accountable to annual yearly progress through reporting of achievement performance with a highlight on student growth each academic-year. As a school leader attends to student academic and achievement performance through monitoring student progress, they are able to assess school needs and support teachers and students through school improvement initiatives, making a positive connection between the task to monitor student progress and leadership self-efficacy. Thus, school leaders are confident and feel effective in their abilities related to monitoring student progress resulting from the focus and high stakes assessment provided by accountability measures.

With the instructional leadership practice of curriculum coordination, this study revealed it as a significant predictor of assistant principals' leadership self-efficacy. With curriculum coordination, Hallinger and Murphy (1985) described the importance of school leaders ensuring

the alignment of curricular objectives to actual instruction and assessment as well as the “continuity in the curriculum across grade levels” (p. 222). While research reveals its importance, the instructional leadership practice of curriculum coordination can be a time-consuming process that is complex and often lacks structure. Additionally, although just as integral a component to student success, curriculum coordination may arguably have a less *public* presence within the daily activities of the school thereby more frequently tasked out to assistant principals.

The study revealed statistically significant differences in leadership self-efficacy of principals and assistant principals. Data revealed a higher leadership self-efficacy within principals as compared to assistant principals. A consideration for district and school leaders, state entities, and corresponding policy makers would be to further study the causes and implications of this difference to provide professional learning to strengthen school leader practices and influence student achievement to attain school improvement. Therefore, implications exist for future actions aligned to instructional leadership practices and their leadership self-efficacy. A consideration for key constituents is to continue professional learning related to instructional leadership practices as well as aid school leaders in balancing both instructional and managerial tasks to ensure the daily operations of the school are being met in all areas. This in turn could elevate the importance of and enhance practice to deepen the understanding of these practices, and in turn, influence student achievement to attain school improvement.

### **Recommendations for Future Research**

Findings from this study provided initial insight into instructional leadership practices of school leaders as well as their leadership self-efficacy in addition to the degree instructional leadership

practices predicted leadership self-efficacy. Recommendations for future research involving instructional leadership practices and leadership self-efficacy is warranted.

First, in order to gain a larger population, future research could include additional schools in other areas, whether within one state, throughout the nation, or in other countries or locations. Expanding the reach of research would broaden the scope of the population to include factors influenced by other geographic reference points. An additional consideration to enlarge the population would also be to include other types of schools. Focusing this study on public schools, specifically looking at varied settings (urban, suburban) generated results from the public setting and including private schools could strengthen the understanding of instructional leadership practices and their prediction of leadership self-efficacy in varied school settings.

Second, the researchers viewed instructional leadership practices through the instructional leadership framework of Hallinger and Murphy (1985) where the general roles of principals are divided into three dimensions identified as Defining the School Mission, Managing the Instructional Program, and Promoting a Positive Learning Climate. However, for the purposes of this study, the researchers only focused on the dimension of Managing the Instructional Program (Supervising and Evaluating Curriculum, Coordinating Curriculum, and Monitoring Student Progress) as it was most aligned to instructional leadership practices of both principals and assistant principals. In order to gain a more comprehensive understanding of the degree instructional leadership practices predict leadership self-efficacy, future research could include the additional dimensions of Defining the School Mission and Promoting a Positive Learning Climate. While focusing this study on the instructional leadership dimension of Managing the Instructional Program focused the research, expanding the research to include

these additional instructional leadership dimensions may further strengthen the understanding of other types of leadership practices and their prediction of leadership self-efficacy.

Lastly, school leaders, both principals and assistant principals, served as the sample for this study, and data showed differences within the leadership self-efficacy of each group. A recommendation for future research would be to examine the differences within the instructional leadership practices of principals and assistant principals to gain a better understanding of leadership self-efficacy of each group as related to specific leadership practices.

### **Methodological Reflections and Limitations**

The researchers would like to acknowledge the limitations of our study. First, the measures were all self-report surveys. The ongoing limitation with such subjective measures is that people may not be the best, most objective raters of their own perceptions, opinions, or attitudes, and thus, may be prone to over- or under-report, potentially biasing results. Also, even though the sample was large enough to supply enough statistical power to detect statistically and practically significant differences between groups and predictive effects, a larger sample would, perhaps, have allowed for more stable results. The sample was one of convenience, and hence, non-random, thereby limiting the generalizability and representativeness of the findings to other samples of this population. Finally, our research design was cross-sectional and non-experimental in nature, and hence, it is understood that no causal claims can be drawn from our data.

Despite these limitations, however, the findings provide tentative insights and information regarding the mechanisms involved in predicting leadership self-efficacy, which could be used to develop follow up qualitative studies to deepen understanding which could then inform the development of experimental or quasi-experimental interventions. Thus, the

researchers believe our study contributes substantively to the literature on the topics relevant to educational leadership.

### **Conclusion**

According to results of this study, the instructional leadership practices of school leaders predict their leadership self-efficacy. As school leaders engage themselves in tasks impacting school improvement, they will feel effective in their responsibilities, decisions, and actions. Yet, differences exist in the leadership self-efficacy of principals and assistant principals. As school leaders continue to study instructional leadership practices and leadership self-efficacy and strengthen their practices through professional learning, their leadership will develop, and the attainment of school improvement will be the intended outcome.

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