Principal Instructional Leadership Behaviors: Teacher vs. Self-Perceptions

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In response to ever-increasing accountability of school principals to demonstrate higher levels of student achievement, instructional leadership continues to be an important focus among educational researchers. In this paper, researchers briefly review the literature base regarding instructional leadership, then present the conceptual framework adopted for the study. Using the Principal Instructional Management Rating Scale (PIMRS), the team measured self-perceptions of principals (n=17) regarding frequency of instructional leadership behaviors enacted in daily leadership, then compared self-reports to reports of teachers (n= 407) in principals' schools. Findings revealed no significant differences between respondent groups–a departure from typical findings in similar studies. Further investigation of these non-significant differences, however, indicated that magnitude and direction of principal-teacher differences varies among schools in the sample. The article concludes with possible implications for further research and practice.

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Introduction

In response to mounting expectations holding school principals accountable for demonstrating increasing levels of student achievement, instructional leadership continues to be an important focus among educational researchers. Acknowledging a burgeoning focus in the empirical literature on distributed leadership models (Spillane, 2006) and the important role teachers play in instructional leadership (Barth, 2001; York-Barr & Duke, 2004), researchers focused this study on specific instructional leadership behaviors of the primary instructional leader in schools–the school principal. Hallinger and Murphy (2012) wrote, "While effective leadership cannot guarantee successful education reform, research affirms that sustainable school improvement is seldom found without active, skillful, instructional leadership from *principals* and teachers" (p. 6, emphasis added).

In light of this recent and growing emphasis placed upon the role of school building principal to perform as an instructional leader, research team members were interested in exploring and comparing principal self-perceptions of their own instructional leadership behaviors with the perceptions held by teachers whose instructional practice these principals supervised. In other words, we wanted to explore whether or not teachers and principals agreed regarding how frequently the principal performs specific behaviors and duties of an instructional leader. In previous studies, these sample groups have tended to differ significantly from one another. Hallinger, Wang, and Chen (2013) noted that "researchers consistently report significant differences between teacher and principal perceptions of the principal's instructional leadership. Moreover, principal self-report scores tend to be substantially higher than those obtained from teachers (p. 277).

The team conducted this study in a mid-sized school district in the southeastern portion of the United States, with all schools, principals, and teachers in the district invited to participate. It is important to note that this study is one of two companion studies, conducted simultaneously in two neighboring school districts, but for different purposes and with separate respondent groups. See Gurley, Anast-May, O'Neal, Lee, & Shores, (2015) for a complete description of the companion study.

Research Objectives

The purpose of this study was to measure self-perceptions held by school principals regarding the frequency with which principals enacted specific instructional leadership behaviors, as defined by Hallinger and Murphy (1985), and measured by the *Principal Instructional Management Rating Scale* (PIMRS) (Hallinger, 1983). Research question asked, How do principal self-perceptions compare to those held by teachers in these principals' schools regarding how often principals demonstrate specific instructional leadership behaviors?

Background

Recently, the role of the school building principal in the United States has evolved and expanded in many different ways. The most important recent change lies in the increased focus on instructional leadership skills of school principals. This focus has taken center stage in the discourse regarding school improvement, illuminated by the increasingly intense spotlight of accountability (Fullan, 2006; Hall & Hord, 2002; Hallinger, 2011; Hallinger & Heck, 2010;

Hallinger & Murphy, 2012; Leithwood, Harris, & Hopkins, 2008). These accountability policies have reignited researcher interest in instructional leadership, reframing their thinking about instructional leadership as an *option* to a *necessity* for school administrators (Murphy, 2008; Silva, White, & Yoshida, 2011). According to Hallinger and Murphy (2012), "Today, we view instructional leadership as an influence process through which leaders identify direction for the school, motivate staff and coordinate school and classroom-based strategies aimed at improvements in teaching and learning" (p. 7).

Researchers agree that improving schools in the 21st century requires that principals exhibit strong skills and expertise in instructional leadership (Hallinger, 2011; Hallinger & Heck, 2010; Leithwood et al., 2008). Recent discussions offered in the literature on instructional leadership contend that, next to teaching, the school leader is a key lever in school reform (Hallinger & Heck, 1998; Leithwood, Louis, Anderson, & Wahlstrom, 2004; Supovitz, Sirinides, & May, 2010; Waters, Marzano, & McNulty, 2003). Additionally, the empirical evidence provided in recent years (Hallinger, 2011; Leithwood & Jantzi, 2000; Robinson, Lloyd, & Rowe, 2008) also affirms the importance of instructional leadership to the professional practice of school principals.

Hallinger and Heck (1998) identified the impact of leadership in terms of categories of defining school mission, managing the instructional programs and promoting the school climate. They further identified the impact of leadership in terms of mode of impact as direct, mediated and reciprocal. Blase and Blase (1999) favor a broader perspective to instructional leadership in which instructional leaders value a blend of supervision, staff development and curriculum development.

More current authors agreed with these earlier works regarding the instructional practices of principals, and advocated for principals to place teaching and learning at the core of their leadership efforts. Leithwood et al., (2004) stated that instructional leaders today must be engaged in setting direction in their schools by (a) building and communicating a compelling vision; (b) developing shared goals; (c) engaging in effective planning and organization; (d) clarifying roles and objectives; (e) motivating and inspiring others; and (f) setting high performance expectations for all.

Leithwood, Day, Sammons, Harris and Hopkins (2006) examined a meta-analysis conducted by Marzano and his colleagues (Marzano, Waters, & McNulty, 2005; Waters et al., 2003). Marzano and his team reviewed "70 empirical studies over a 30-year period which included objective measures of student achievement and teacher reports of leadership behaviors" (p. 21). As an outcome of this meta-analysis, Marzano and colleagues identified 21 leadership responsibilities which contributed to instructional leadership of principals and ultimately in increased levels of student achievement.

Educational experts have evolved substantially over the past several decades in their thinking about instructional leadership and the role that the principal plays in supporting the teaching and learning environment within a school (Gurley et al., 2015). Generally speaking, the evidence supports the notion that the principal plays a critical role in establishing and maintaining a focus on learning in a school through his or her continual and routine engagement in instructional leadership behaviors. It is toward a more precise definition of instructional leadership, and the identification of the specific best practices in instructional leadership behaviors that we now turn in the discussion of the conceptual framework adopted to guide this study.

Conceptual Framework

Leithwood et al. (2006) compared key principal/leader behaviors described across various models of instructional leadership they found in the related literature. These authors concluded that "Hallinger (2000), Hallinger and Murphy (1985) and Heck, Larson and Marcoulides (1990) have provided the most fully specified model and by far the most empirical evidence concerning the nature and effects of that model in practice" (p. 20). According to Leithwood et al., there have been 125 studies published between 1980 and 2000 regarding this foundational model of instructional leadership.

The Hallinger and Murphy (1985) framework of instructional leadership was among the first to identify specific, key behaviors enacted by principals in an attempt to more carefully define the construct of instructional leadership. The research team adopted this framework as a conceptual anchor to guide the research, data analysis, and interpretation because it is the dominant and most widely affirmed school leadership terminology for the past quarter of a century and has been used most frequently in empirical investigations (Hallinger, 2008; Hallinger & Heck, 1996; Leithwood et al., 2006).

This definition of instructional leadership is comprised of three dimensions, each accompanied by sub-scale dimensions or *functions.* The three primary dimensions include: (a) *Defining the School's Mission*, (b) *Managing the Instructional Program*, and (c) *Promoting a Positive School Learning Climate*. Each of these dimensions is supported or underpinned by two to five specific instructional leadership behaviors called *functions.* For example, the dimension *Defining the School's Mission* is supported by the specific functions of (a) *Frames the School's Goals,* and (b) C*ommunicates the School's Goals.*

Based upon this conceptual framework, Hallinger and Murphy (1985) developed the *Principal Instructional Management Rating Scale* (PIMRS)*,* an instrument that has been used widely since to measure the frequency with which school principals engage in, or are observed engaging in, the specific functions identified. The PIMRS was designed to be completed by principals themselves, regarding their own instructional leadership behavior, but also by teachers and by principal supervisors who respond to the survey based upon their observation of the frequency with which they have observed the principal enacting the specific instructional leadership functions. By administering the PIMRS to these three respondent groups (i.e., principals, teachers, and principal supervisors), the individual principal can obtain a thorough, 360-degree perspective on their instructional leadership practice.

Methods

Researchers administered the PIMRS (Hallinger & Murphy, 1985) to principals and to teachers in each of the schools (n = 21) in a mid-sized school district located in the southeastern region of the United States. The 50-item principal version of the PIMRS asks respondents to rate, on a Likert-type scale, how frequently they perceive themselves enacting specific instructional leadership behaviors in the schools they lead (1= *Almost Never,* 5 = *Almost Always*). Behaviors measured by the scale have been defined in the literature as best practices demonstrated by principals in effective schools. The survey was administered, via email invitation, in electronic format. Of the 21 principals who were invited to complete the survey, 17 principals returned complete surveys, yielding a response rate of 80.9%.

In an attempt to provide a critical point of comparison with principal data, all certified teachers in these principals' schools (n = 661) were invited, via separate email, to anonymously

complete an electronic version of an alternate, 22-item PIMRS, shortened for ease of administration to teachers (see Hallinger, & Wang [2015] for discussion of validity and reliability measures of the shortened version of the PIMRS). Of the teachers invited, 407 returned complete surveys, yielding a return rate of 61.5%. In the interest of protecting all human subjects, this research project was reviewed and approved by the Institutional Review Board at the affiliated university.

Data Sources

Researchers gathered data using the PIMRS. The PIMRS has been used extensively over the last three decades by numerous school systems and in more than 200 empirical studies conducted in 22 countries (Hallinger, 2011). The PIMRS is scored by calculating the mean response for each survey item among, but not across, respondent groups. The PIMRS yields 10 *function* scores by averaging responses for the five items comprising each subscale. By further averaging the function scores under each of the dimensions, the scale yields three *dimension* scores. These 10 function and three dimension scores, from each respondent group, comprise the instructional leadership profile for the individual principal. Profiles may be helpful for principals to use as a self-assessment tool by comparing the means and distributions of scores within and across respondent groups.

Results

Principals responded to the survey in roughly equal numbers of male and female participants. Notably, however, about a third of participants (6 of 17) reported being either in their first year or in the first four years of their career as a principal. About half of the teacher respondent group reported having worked with their principal for less than five years. Teachers were generally more experienced in their roles, compared to their principals, with 65% (n = 267) reporting having 10 or more years' of classroom teaching experience. Demographic characteristics of respondent groups are reported in Table 1 and Table 2.

Table 1
Demographics of 17 Principals Completing PIMRS

Characteristic	*F*	%
Male	8	47
Female	9	53
Total	17	100
Principal 1 Year	2	12
Principal 2-4 Years	4	22
Principal 5-9 Years	9	53
Principal 10-15 Years	0	0
Principal More than 15 Years	2	12
Total	17	

High School (Grades 9-12)	4	24
Middle School (Grades 6-8)	5	29
Elementary School (Grades P-5)	8	47
Total	17	100

Table 2
Demographics of Teachers Completing PIMRS

Characteristic	*f*	%
Years Worked with Principal		
1	88	22
2-4	109	27
5-9	157	39
10-15	31	8
More than 15	19	5
Total Teacher Responses	404	101 +
Years of Experience as a Teacher		
1	18	4
2-4	48	12
5-9	74	18
10-15	63	15
More than 15	204	50
Total Teacher Responses	407	99 +
School Level		
High School (Grades 9-12)	91	22
Middle School (Grades 6-8)	143	35
Elementary School (Grades P-5)	173	43
Total Teacher Responses	407	100

Note. + denotes rounding error.

In an effort to provide evidence of reliability for PIMRS scores for both principal and teacher responses, the research team calculated a Chronbach's Alpha (Chronbach, 1951) score for each survey. In addition to the 50-item survey scores, however, and in order to be able to compare principal and teacher scores more directly, the team created an *ad hoc* principal survey (for statistical analysis only) using only the 22 items from the principal survey that matched the 22 items on the shortened teacher form of the test. Chronbach's Alpha scores for the full version of the principal survey demonstrated a fairly wide range among the individual functions

measured on the test. But reliability estimates for the three main survey dimension scores were strong, ranging from α = 0.81 to α = 0.91. Reliability estimates for the 22-item *ad hoc* principal survey were considerably lower, ranging from α = 0.55 to α = 0.82. Reliability estimates, as well as descriptive statistics for the principal survey and principal *ad hoc* survey, are presented in Table 3. (Please note that the number of principals [n = 28] used in the calculation of the Chronbach's Alpha scores includes an additional group of 11 principals from a neighboring school district who responded to the exact same survey, administered in the same manner and at the same time, but for a different, companion study. See [citation omitted for anonymity] for a description of this parallel study. Additional principals from the companion study were added to this analysis due to small sample size.).

Table 3
Descriptive Statistics and Alpha Coefficients – Principal Survey

Element	50-items (n=28 principals)				22-items (n=28 principals)			
	Items	*M*	*SD*	*α*	Items	*M*	*SD*	*α*
Dimension 1: Defining the School Mission	10	4.45	0.43	0.81	5	4.63	0.32	0.55
Function 1A: Frames the School's Goals	5	4.60	0.37	0.70	3	4.73	0.34	0.51
Function 1B: Communicates the School's Goals	5	4.29	0.62	0.82	2	4.48	0.48	0.36
Dimension 2: Managing the Instructional Program	15	4.35	0.46	0.91	7	4.44	0.43	0.82
Function 2A: Supervises & Evaluates Instruction	5	4.32	0.54	0.75	2	4.34	0.58	0.32
Function 2B: Coordinates the Curriculum	5	4.56	0.46	0.80	3	4.64	0.42	0.69
Function 2C: Monitors Student Progress	5	4.16	0.59	0.87	2	4.25	0.55	0.79
Dimension 3: Developing the School Learning Climate	25	4.18	0.44	0.86	10	4.18	0.53	0.78
Function 3A: Protects Instructional Time	5	4.44	0.41	0.59	1	4.93	0.26	NA
Function 3B: Maintains High Visibility	5	3.85	0.70	0.68	2	4.57	0.52	0.26

Function 3C: Provides Incentives for Teachers	5	3.96	0.76	0.81	3	3.87	0.84	0.71
Function 3D: Promotes Professional Development	5	4.45	0.55	0.80	2	4.36	0.54	0.38
Function 3E: Provides Incentives for Learning	5	4.18	0.69	0.81	2	3.71	1.02	0.70

Note: This table provides descriptive statistics and (Cronbach's Alpha) reliability estimates for the PIMRS principal form (50 items) and for 22 items that match the PIMRS teacher short form. Principal responses from two school systems are combined due to small sample size from current study.

Reliability estimates for the three main dimensions measured by the PIMRS among the teacher respondent group were also quite high, ranging from $\alpha = 0.93$ to $\alpha = 0.94$. Reliability estimates and descriptive statistics for the teacher survey are presented in Table 4.

Table 4
Descriptive Statistics and Alpha Coefficients – Teacher Survey

	One school system (n=407 teachers)			
Element	Items	*M*	*SD*	*α*
Dimension 1: Defining the School Mission	5	4.50	0.69	0.93
Function 1A: Frames the School's Goals	3	4.55	0.67	0.90
Function 1B: Communicates the School's Goals	2	4.44	0.78	0.83
Dimension 2: Managing the Instructional Program	7	4.29	0.80	0.93
Function 2A: Supervises & Evaluates Instruction	2	4.17	0.94	0.80
Function 2B: Coordinates the Curriculum	3	4.38	0.81	0.89
Function 2C: Monitors Student Progress	2	4.29	0.84	0.75
Dimension 3: Developing the School Learning Climate	10	4.05	0.93	0.94
Function 3A: Protects Instructional Time	1	4.53	0.83	
Function 3B: Maintains High Visibility	2	4.35	0.91	0.84
Function 3C: Provides Incentives for	3	3.68	1.21	0.90

Teachers				
Function 3D: Promotes Professional Development	2	4.20	0.98	0.80
Function 3E: Provides Incentives for Learning	2	3.90	1.14	0.88

In reviewing the mean scores for the three dimensions of instructional leadership and the 10 functions, or sub-dimensions measured by the PIMRS, the team discovered that principals, on average, rated the frequency with which they enact the specific instructional leadership behaviors identified on the survey at about the same level as teachers report observing principals enacting these behaviors. On several of the scores, principals rated themselves higher than the teachers, a typical pattern reported in the literature (Hallinger et al., 2013), but for several other behaviors, the teachers actually rated the principal higher than the principals rated themselves. But, in general, the two respondent groups agreed, across function and dimension scores, indicating that there was a close match between how principals perceived themselves as displaying these specific instructional leadership behaviors and how teachers viewed principal behaviors. Results from this part of the analysis are reported in Table 5.

Table 5
Descriptive Statistics for PIMRS Teacher Survey and Comparable Principal Surveys

	17 Schools (n=17 principals) 50 items		17 Schools (n=17 principals) 22 items		17 Schools (n=407 teachers) 22 items	
Element	*M*	*SD*	*M*	*SD*	*M*	*SD*
Dimension 1: Defining the School Mission	4.35	0.51	4.60	0.39	4.51	0.68
Function 1A: Frames the School's Goals	4.59	0.43	4.73	0.38	4.55	0.67
Function 1B: Communicates the School's Goals	4.12	0.69	4.41	0.54	4.44	0.78
Dimension 2: Managing the Instructional Program	4.25	0.52	4.36	0.45	4.31	0.79
Function 2A: Supervises & Evaluates Instruction	4.34	0.52	4.32	0.61	4.20	0.93
Function 2B: Coordinates the Curriculum	4.39	0.50	4.55	0.42	4.39	0.79
Function 2C: Monitors Student Progress	4.01	0.66	4.12	0.57	4.31	0.83
Dimension 3: Developing the School	4.07	0.45	4.23	0.45	4.07	0.91

Learning Climate						
Function 3A: Protects Instructional Time	4.25	0.39	4.94	0.24	4.55	0.80
Function 3B: Maintains High Visibility	3.75	0.66	4.50	0.53	4.37	0.91
Function 3C: Provides Incentives for Teachers	3.91	0.80	4.20	0.73	3.70	1.20
Function 3D: Promotes Professional Development	4.34	0.59	4.26	0.53	4.20	0.98
Function 3E: Provides Incentives for Learning	4.11	0.69	3.62	0.96	3.93	1.12

This finding is of particular interest in light of the fact that, over the last three decades, typical findings indicate that principals tend to rate themselves consistently and substantially higher than do teachers regarding principal instructional leadership behaviors. Hallinger et al., (2013) stated that "principal self-report scores [on the PIMRS] tend to be substantially higher than those obtained from teachers" (p. 277).

In an effort to compare principal scores more closely to those of the teachers in their specific buildings, the research team also conducted paired *t* tests for each of the schools. For each dimension, the principal score for a given school was paired with the mean of the teacher scores for that school. Results indicated no statistically significant differences between teacher and principal dimension scores on any of the three dimensions. Results from the paired *t* test are shown in Table 6.

Table 6
Paired t Test Results on Three Dimensions of PIMRS Comparing Principal Means with Teacher Means

	Principal			Teacher			Paired *t* test Results		
Dimension	*N*	*M*	*SD*	*N*	*M*	*SD*	*df*	*t*	*Pr* >|*t*|
1	17	4.60	0.39	17	4.51	0.68	16	0.60	0.5601
2	17	4.36	0.45	17	4.31	0.79	16	0.18	0.8619
3	17	4.23	0.45	17	4.07	0.91	16	1.06	0.3064

Upon further analysis, however, the research team discovered that, despite the lack of statistically significant differences relative to teacher and principal dimension scores within buildings, there are, indeed, differences in direction and magnitude of scores obtained within buildings. In some schools, principals consistently rate themselves higher than did their teachers in enacting instructional leadership behaviors. In other schools, the opposite result was observed. In the remaining schools, the scores were very closely matched. Such discrepancies between schools may suggest that calculation of mean scores and tests of significance selected for this study may, in fact, have a centralizing effect on results, and may therefore mask important discrepancies within and between schools. Further examination of such discrepancies may reveal that in some schools there is a substantial mismatch in perceptions of principal instructional leadership behaviors, while in the majority of schools in our sample (9 of 17; 53%), perceptions of the frequency of enactment of these behaviors seem well matched. Further analysis is

indicated in order to uncover the causes for such discrepancies within buildings. Averages by individual school are graphically displayed in Figures 1 through 3.

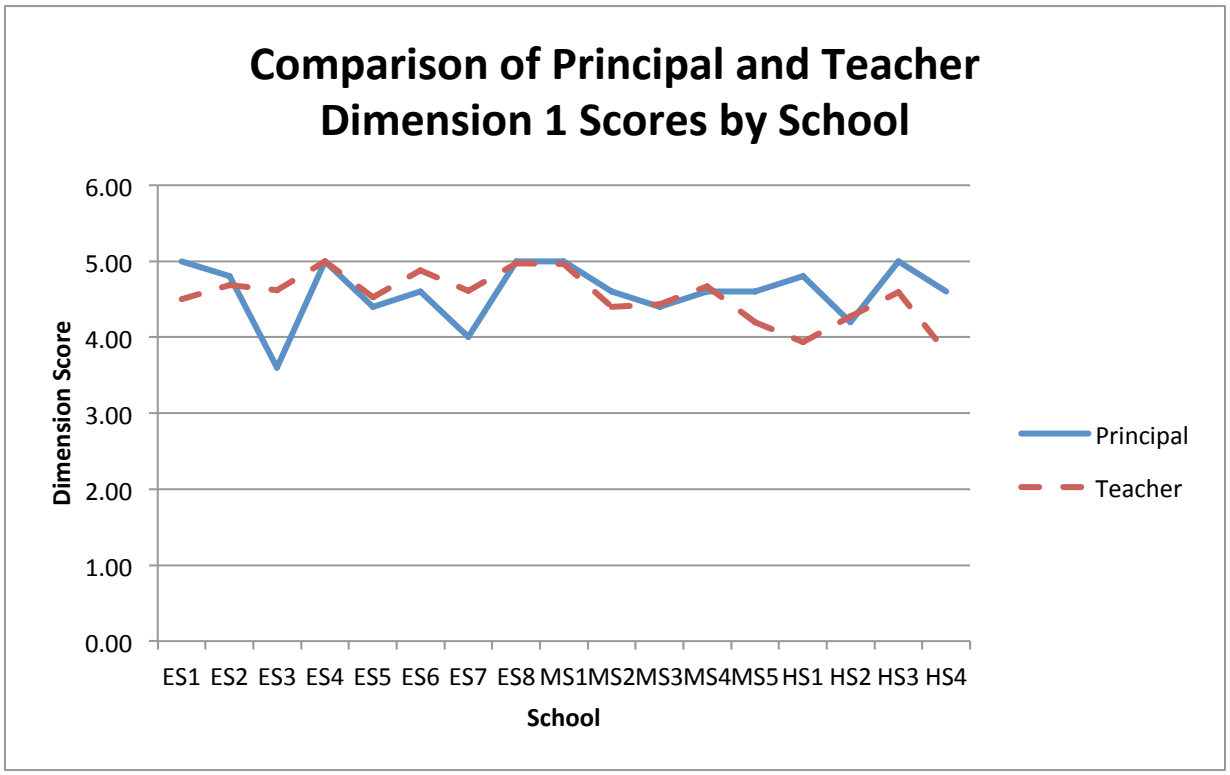

Figure 1. Comparison of principal and teacher scores by school for Dimension 1: *Defining the School Mission*.

Note: E=Elementary School, M=Middle School, H=High School

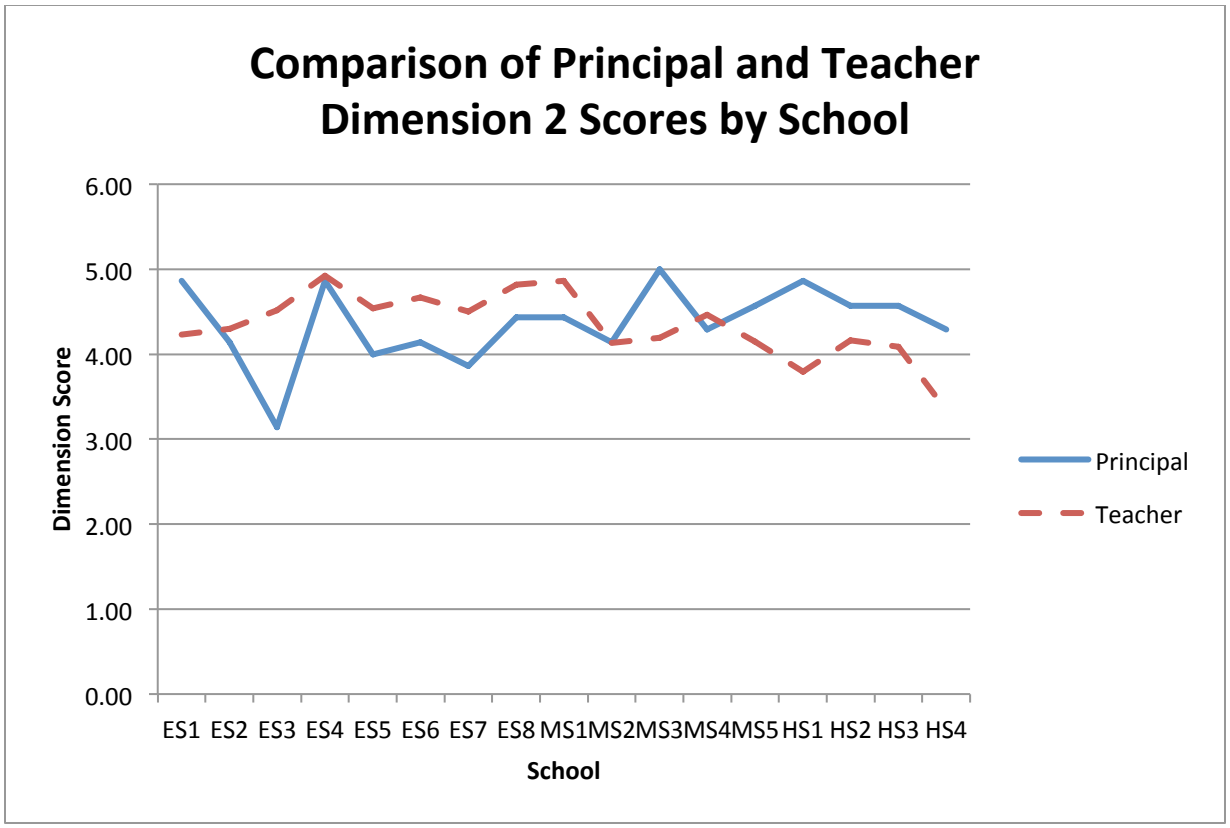

Figure 2. Comparison of principal and teacher scores by school for Dimension 2: *Managing the Instructional Program.*

Note: E=Elementary School, M=Middle School, H=High School

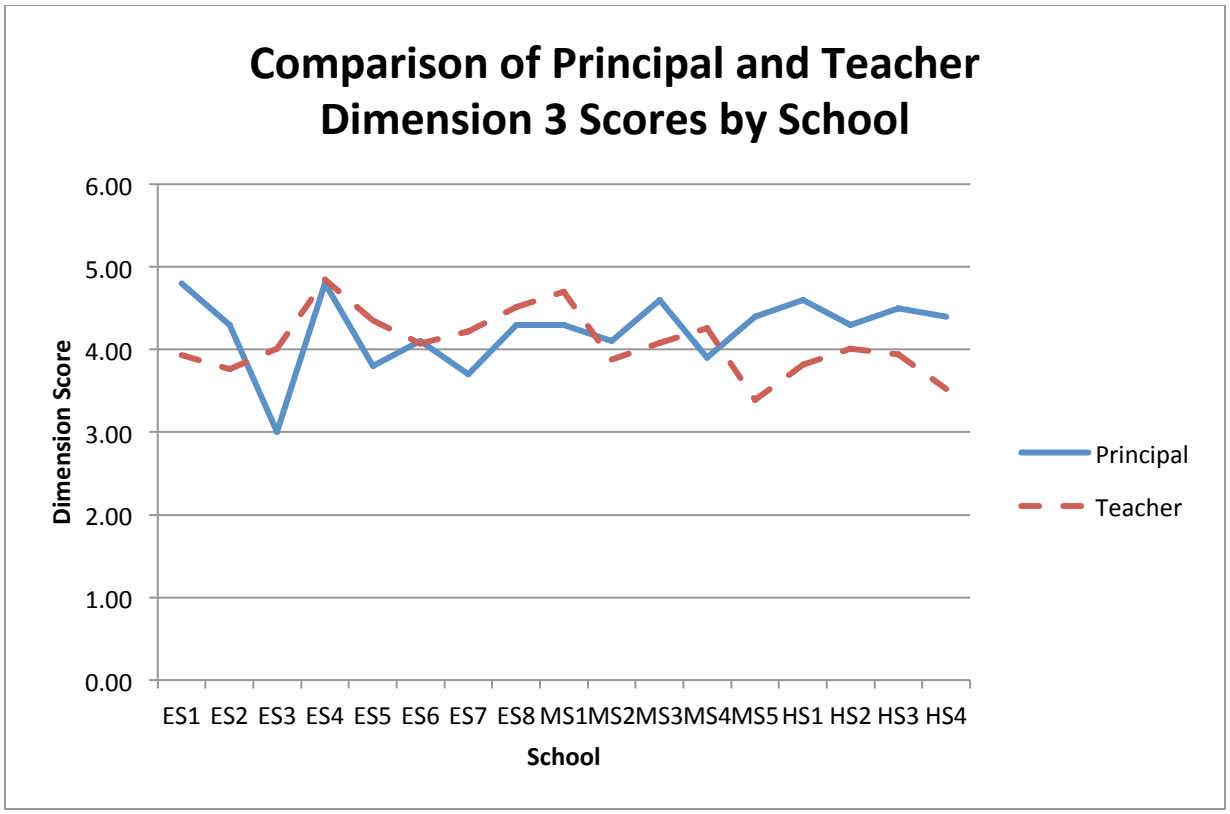

Figure 3. Comparison of principal and teacher scores by school for Dimension 3: *Developing the School Learning Climate.*

Note: E=Elementary School, M=Middle School, H=High School

Significance of the Study

The importance of this study lies in the fact that findings depart somewhat from what has typically been reported by other researchers using the same measure. As mentioned above, it is a much more typical finding that principals rate themselves substantially and consistently higher than do their teachers in reporting on the frequency with which they engage in instructional leadership behaviors measured by the PIMRS (Hallinger et al., 2013). In this study the research team discovered that, while mean scores suggest a close match in perceptions between respondent groups, when the team compared findings by individual building, results varied. Though perhaps tempting to interpret the initial finding of a lack of significance in differences between the two respondent groups as an encouraging result, findings suggest that, within individual school buildings, differences are observed which merit further investigation. Researchers would do well to further explore why some principals perceive themselves as more frequently engaged in instructional leadership behaviors than do their teachers, and why some principals and teachers report the opposite perceptions.

Nevertheless, given the findings from most (53%) of the buildings in the sample, i.e., that there is little if any difference between the perceptions of principals and teachers, there is a suggestion that respondent groups generally agree regarding the frequency of principal instructional leadership behaviors enacted and observed. Further, team members wonder, could

these findings indicate that principals in our sample, about a third of whom were serving in the first four years in the role (i.e., newly appointed and therefore likely to be newly matriculated from leadership training programs which emphasize instructional leadership skill development for pre-service principals), are spending more time in instructional leadership than samples of principals measured in previous studies? Samples of this size and limited location are certainly not large enough to merit such a generalization. But, these findings do suggest that further research along these lines is certainly indicated and may indeed prove to be encouraging.

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