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AN EXPLORATORY ANALYSIS OF PRINCIPALS' SELF PERCEPTIONS OF CURRICULAR AND INSTRUCTIONAL LEADERSHIP: EVIDENCE FROM OHIO

by Jeffrey Bucher, MEd & W. Kyle Ingle, PhD

Abstract

In this study, the researchers sought to determine the relationship between principals' characteristics, their schools' characteristics, and the dependent variable—principals' perceptions of their own curricular and instructional leadership (CIL). The researchers found significant and positive relationships between principal characteristics and CIL, including gender (female) and years of principal experience ($p < .01$). Principals with prior teaching experience in suburban schools were significantly related to increases in CIL compared to their counterparts with prior teaching experience in charter schools ($p < .05$). With regard to school-level characteristics, a unit increase in the percentage of African-American students was significantly and positively related to an increase in CIL. However, a unit increase in the percentage of Hispanic students was significantly related to a decrease in CIL.

1. Making Time for Curricular and Instructional Leadership

Listen to W. Kyle Ingle, Assistant Professor and Program Coordinator, Educational Administration & Supervision, Bowling Green State University discuss the Self-Perceptions of Principals of Curricular and Instructional Leadership.

Broadly speaking, school leaders matter, as does their leadership in curricular/instructional matters. Researchers (Shipps & Firestone, 2003) have indicated that the many facets encompassing the role of the school principal have continually evolved, becoming increasingly complex, comprehensive, and time consuming. The myriad of principal activities have fallen under one of two categories: building manager or curricular-instructional leader. Through the years, much of the principalship has fallen under the category of building manager rather than curriculum-instructional leader (Hunkins & Ornstein, 2004). Wong and Nicotera (2007) have noted that the general

focus for school leaders "has been on procedural and programmatic managerial compliance" (p. 41).

Researchers (Hunkins & Ornstein, 2004; Lashway, 2003; Wong & Nicotera, 2007) have indicated that principals consider curricular and instructional leadership a key role, but involvement with daily operations of the school has led to wide discrepancies between actual and desirable time spent on curricular and instructional activities. Involvement in instruction was among the least frequent activities performed by school administrators, who reported only 15 to 20 percent of their time spent on coordinating curricular and instructional activities. Even less time - 3 to 10 percent - was spent observing classroom instruction (Hunkins & Ornstein, 2004). Drake and Roe (2003) reported that principals rated curriculum development as one of the most important principalship tasks—second only to teacher evaluation. In sum, educational leadership researchers have suggested that principals recognize that instructional leadership should be a top priority; but management chores often take precedence, thereby causing role conflict and re-prioritization (Lashway, 2003).

2. Curricular and Instructional Leadership in Ohio

In 2004, the state of Ohio formed a commission whose members were tasked with developing high level quality job performance standards for the state's teachers and principals (Ohio Department of Education, 2007). The Commission on Teaching Success declared, "The absence of standards that provide principles of professional practice for all teachers and school leaders must be addressed if we are serious about ensuring quality teaching in every Ohio classroom" (Ohio Department of Education, 2007, p. 5). As a result of the commission's findings, the Ohio legislature passed Senate Bill 2 in 2004, establishing an Educator Standards Board charged with writing the standards that are in use today. Ohio's school leaders are expected to use the standards for self-assessments of their performance and planning for their own professional development to enhance future performance.

Drawing from survey responses of practicing school principals in the state of Ohio and school-level data maintained by the Ohio Department of Education (ODE), this study focused on Standard 2 of the Ohio Standards for Principals, which states: "Principals support the implementation of high-quality standards based instruction that results in higher levels of achievement for all students" (Ohio Department of Education, 2007, p. 40). We sought to determine the relationship between principals' characteristics, their school's characteristics, and the dependent variable - principals' perceptions of their own curricular and instructional leadership.

3. Sample

The convenience sample consisted of Ohio elementary and secondary school principals who chose to respond to the electronic survey. Principals' email addresses were obtained from the ODE. The email explained the purpose of the online survey, which was available to respondents for three weeks. The electronic survey was made available to all potential respondents in April 2010, yielding 334 respondents out of 3,624 surveys sent (response rate=9%). Of these, 221 willingly provided building identification numbers, allowing us to add school characteristics in model 2 (response rate=6%). Given the small sample size, we compared our sample of all principal respondents and the sub-sample of respondents that voluntarily provided building identification numbers with the characteristics of principals across Ohio and the nation (see Table 1). With regard to gender, our respondents mirrored that of Ohio. The subsample providing building identification numbers was a greater proportion of males (59 %) than females (41%). African-American principals were approximately 13% of public school principals in Ohio. However, the sample and subsample were only 5% and 3%, respectively. Educational attainment comparisons were similar to state percentages with the exception of one. Respondents with doctorates were 10-11% in comparison to Ohio principals statewide. The higher response rate among doctoral earning principals may be explained by their having been through the research process themselves and being able to empathize with needing respondents.

4. Instrumentation

A cross-sectional survey (available upon request from the authors) consisting of 41 closed-structured questions was completed by responding Ohio principals. The instrument consisted of demographic questions written by the researcher and 20 questions related to Standard 2. These were developed by the ODE for use by educators in self- evaluations (2007). The 20 questions exploring principals' knowledge and skills related to Standard 2 consisted of Likert-style questions scaled 0 through 4 with 0 representing "Never"; 1 representing "Rarely"; 2 representing "Sometimes"; 3 representing "Frequently"; and 4 representing "Always" for each element. The researchers pilot tested the instrument by administering it to 12 current/former educators (principals and teachers) before distribution to Ohio principals. Only slight revisions were made to the instrument after pilot testing.

Cronbach's alpha analysis of the items yielded a .928, suggesting more than adequate internal consistency (McMillan, 2004). Principal respondents conducted a self-analysis on the 20 items. These responses were aggregated and served as the dependent variable - principals' self -perceptions of curriculum and instructional leadership (CIL).

5. Data Analysis

In addition to descriptive analysis of our respondents (See Table 2), we undertook multiple regression analysis to examine the relationships between principals' characteristics, their school's characteristics, and their self-perceptions of curricular and instructional leadership (See Table 3). In model 1, the relationships between demographic characteristics of principals and principals' self-perceptions of curriculum and instructional leadership (CIL) were examined. These included variables representing gender, racial characteristics, educational attainment levels, types of degrees earned, teacher licensure characteristics, and prior professional work experiences. In model 2, school-level characteristics were added, including student demographics and school locale.

The researchers first turned their attention to principals' characteristics. In model 1 and model 2, female principals reported significantly higher self-perceptions of curricular and instructional leadership than their male counterparts ($p < .01$). There was roughly a 6 point increase in self-perception among females in comparison to their male counterparts, holding all other variables constant. Like Smith et al. (2006) we found women to have significantly higher self-perceptions for instructional leadership. Cotton (2003) noted that "women tend to have spent more time as teachers before becoming principals" (p. 53). This finding was borne out in our analysis and may explain this finding. Years of teaching experience, however, were significantly related to self-perceptions of curricular and instructional leadership, but only at the .10 level and only so in model 1.

Also, the researchers tested whether those holding a master's in curriculum and instruction or teaching and learning had significantly higher self-perceptions of curricular and instructional leadership than their counterparts who earned master's degrees in other fields (typically educational administration). Our analysis revealed this to be the case significantly only at the .10 level in model 2. A surprising finding was that an additional earned master's degree was negatively associated with self-perceptions of curricular and instructional leadership. This was significant at only the .10 level in model 1, but significant at the .05 level in model 2. Researchers who have analyzed "quantity versus quality" in educational attainment and a variety of outcome variables (e.g., economic growth, salaries) have produced mixed findings (Breton, 2011; Hanushek & Woessmann, 2008). Our findings may lend some credence to the adage, "the more we learn, the less we know."

Although years of teaching experience and type of teaching licenses held by respondents were not variables significantly related to self-perceptions of curricular and instructional leadership (except at the .10 level), types of prior teaching experience were. Notably, principals with suburban teaching experience had significantly higher self-perceptions of curricular and instructional leadership than principals with charter school teaching experiences ($p < .05$), which served as the referent group. Other types of teaching experiences (e.g., rural, urban, and private) were associated with higher self-perceptions than charter school experience, but were either inconsistent across the models or the levels of significance varied from model to model (See Table 3).

Principal respondents were asked to indicate whether they were part of a school improvement plan committee as a teacher. Principals were also asked, "When teaching, I observed peers and provided feedback as part of a teacher evaluation program." Arguably, these experiences might motivate one to pursue the principalship and make them more comfortable with curricular and instructional leadership roles. Principals with school wide committee experience had significantly higher self-perception scores ($p < .05$) than principals who did not in model 1. Although the direction of the relationship was similar in model 2, the significance level dropped to the .10 level. Also, we found a unit increase in principal experience was significantly associated ($p < .05$) with an increase in self-perception of curricular and instructional leadership. This relationship - consistent across both models - suggests that as principals stay in the position longer, their confidence grows.

Middle/junior high school principals had significantly higher self-perception scores than their high school principal counterparts (which served as the referent group). This was significant at only the .10 level in model 1, but at the .05 level in model 2. This may be explained by what has been acknowledged in the literature as a tendency toward developing interdisciplinary teams of teachers in the middle grades. This is undertaken with the rationale that such teams mitigate teacher isolation through working groups of colleagues to discuss and solve problems; that instruction may be improved by increasing integration and coordination across subjects; and that teachers on a team sharing the same group of students will be able to discuss and respond quicker to the needs of individual students (e.g., Maclver & Epstein, 1991; Merenbloom, 1986; Vars, 1987). This common approach to instruction in middle schools may increase self-perceptions of principals because the culture of shared responsibility for instruction and the means of addressing problems as a team are already present.

Researchers hypothesized that principals in urban settings would have significantly lower self-perception scores than counterparts in rural and suburban settings. This was based on research that overwhelmingly had shown urban areas vulnerable to higher teacher attrition rates, higher minority enrollments, higher rates of poverty, higher rates of special education (non-gifted) students, and students speaking English as a second language (e.g., Ingersoll, 2002; Lankford, Loeb, & Wyckoff, 2002). School locale was not significant. However, a unit increase in African-American students in the responding principals' school was associated with a significant increase in curricular and instructional self-perceptions ($p < .05$). The reverse was so for principals in schools with higher percentages of Hispanic students ($p < .05$). The language difference and the inherent challenges to providing an education to these non-English speaking students may explain this significant and negative relationship.

As to overall model quality, the adjusted R-squared - the proportion of Y variability explained by the model(s) - increased from .172 in model 1 to a .300 in model 2. However, the valid n-size decreased in model 2. This was because principals were asked to provide their buildings' unique identifying numbers (IRN) as part of the survey. A total of 113 respondents opted not to do so or did not know it. As such, a convenient

sample and small n-size were characteristics that limit the generalizability of our study. Given these limitations, our findings should be interpreted with caution.

6. Implications

We have acknowledged that our exploratory study was hampered by a convenience sample and a small response rate/sample size in comparison to the population (Ohio principals). Hopefully, researchers will be more successful in obtaining larger or even random samples in future studies in order to gain statistical power. Researchers may also want to move beyond self-perceptions as a dependent variable. After all, one may believe oneself to be excellent curricular and instructional leaders, but perceptions of curricular and instructional leadership among stakeholders (e.g., teachers, parents, school board, superintendent) may be at odds with those of the school leader. Student outcomes, teacher attrition rates, faculty and staff members' job satisfaction (or lack thereof) may provide evidence that suggests one's self perceptions are inflated.

There is the potential for researchers to add principal characteristics and behaviors to value-added models that seek to isolate the impact of a teacher or principal on student learning. Value-added models are controversial and fraught with issues (e.g., McCaffrey et al., 2004). However, in response to requirements for federal Race to the Top funds, Ohio lawmakers have legislated a system in which Ohio principals and teachers are evaluated using a framework in which fifty percent is based on measures of student academic growth (Ohio Revised Code §3319.112). Policymakers at the state and federal level continue to see this as a promising approach for increasing teacher *and principal* accountability. This policy development reinforces our most important implication for school leadership practice - hiring principals who can be effective curricular and instructional leaders.

The careful recruitment and selection of principals (Brown-Ferrigno & Shoho, 2004) is as relevant today as ever. If principals with higher self-perceptions of curricular and instructional leadership are indeed more effective, our findings suggest that school districts may want to recruit more females, who tend to have longer careers as teachers, and are historically under-represented in the principal ranks (Crow & Glascock, 1995). Principals - most of whom have experience as teachers - are expected to recognize quality in the delivery of curriculum and instruction. When hiring for school leadership positions, school superintendents and boards should consider candidates' prior experiences as teacher leaders (e.g., school improvement plan committee service). These may serve as valuable signals of fitness for the role of school leaders and evidence of strong motivation. There are risks in hiring a candidate for a school leadership position who is less experienced in the classroom. Superintendents and school boards must ask themselves, "Can someone be an effective instructional leader with so few years in a classroom?" Students and teachers need school leaders confident and capable in the facilitation of teaching and learning - the "technical core" of schools (e.g., Hoy & Miskel, 2008).

Table 1.***Demographic Comparison***

Characteristic	Ohio— Sample	Ohio— Sample with building- level data	Ohio— Statewide*	US*
Male	55.0	59.0	55.0	49.7
Female	45.0	41.0	45.0	50.3
Caucasian	94.0	96.0	86.1	80.9
African- American	05.0	03.0	12.9	10.6
Hispanic	00.6	01.0	00.5	06.5
Other	00.4	00.0	00.5	02.0
Master's Only	66.0	67.0	70.8	61.1
Specialist	23.0	23.0	24.2	29.0
Doctorate	11.0	10.0	05.0	08.4

**SOURCE:* U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Principal Data File," 2007-08.

Table 2.

Descriptive Analysis

Variable		Min.	Max.	Mean	SD
Gender	Male	0	1	.55	.498
	Female	0	1	.45	.498
Race	Caucasian	0	1	.94	.235
	African-American	0	1	.05	.218
	Hispanic	0	1	.01	.076
	Native-American	0	1	.00	.054
Educational Attainment	# of BAs degrees earned	1	2	1.09	.279
	# of MAs earned	1	2	1.16	.368
	Education BA	0	1	.85	.357
	Business BA	0	1	.02	.132
	Social Services BA	0	1	.00	.054
	Science BA	0	1	.03	.169
	Liberal arts BA	0	1	.08	.270
	Various BAs	0	1	.02	.142
	CIS Masters	0	1	.09	.288
	Ed. Admin. Masters	0	1	.66	.473
	Post MA (other than Ph.D.)	0	1	.23	.423
Ph.D./Ed.D.	0	1	.11	.308	
Teacher Licensure	Provisional 2 year teacher lic.	0	1	.02	.142
	Professional teacher lic.	0	1	.59	.493
	Permanent teacher lic.	0	1	.36	.482
	Other teacher lic.	0	1	.03	.161
Teaching Experience	Years of teaching exp.	0	47	14.02	7.784
	Rural public teaching exp.	0	1	.43	.495
	Urban public teaching exp.	0	1	.23	.419

	Suburban public teaching exp.	0	1	.33	.469
	Private school teaching exp.	0	1	.02	.142
	Charter school teaching exp.	0	1	.01	.108
	School-wide committee service	0	1	.71	.453
	Observed/evaluated teachers	0	1	.26	.441
Principal Experience	Years of principal exp.	1	38	10.69	7.703
	Elementary level	0	1	.50	.501
	Middle/junior high level	0	1	.17	.379
	High school level	0	1	.25	.435
	Multilevel level	0	1	.07	.256
Other Work Experience	Military exp.	0	1	.04	.199
	Business exp.	0	1	.20	.400
	Youth development exp.	0	1	.08	.270
	Social service exp.	0	1	.03	.161
	Other work exp.	0	1	.05	.212
	No other work exp.	0	1	.61	.488
CIL	Composite Score	18	80	58.00	10.851

Valid n (listwise): 334

Table 3.

Multiple Regression Analysis

	<i>Model 1</i>			<i>Model 2</i>		
Variables in the Model	B	SE	t	B	SE	t
Constant	39.546	6.141	6.440***	39.55 3	8.350	4.737***
Female	6.219	1.373	4.531***	5.583	1.600	3.491***
African-American	-.769	2.954	-.260	.855	4.591	.186
Hispanic	.832	7.812	.107	6.382	8.048	.793
Native-American	10.192	10.625	.959	-----	-----	-----
# of BAs earned	.341	2.095	.163	.609	2.444	.249
# of MAs earned	-2.463	1.644	-1.498*	-5.473	2.233	-2.451**
BA (Business)	1.846	4.484	.412	.649	4.235	.153
BA (Social Services)	-3.732	11.296	-.330	-4.401	10.703	-.411
BA (Science)	3.353	3.543	.946	3.906	4.028	.970
BA (Liberal Arts)	-1.159	2.202	-.526	-3.290	2.732	-1.205
BA (Other)	-1.078	4.298	-.251	-3.424	4.927	-.695
MA (Curriculum)	.538	2.128	.253	5.488	2.832	1.938*
Post MA (other than doctorate)	1.332	1.458	.914	.573	1.722	.333
Doctorate	.581	2.028	.017	.934	2.513	.333
2-year Prov. Teacher License	-1.952	4.267	-.457	- 16.26 3	10.008	-1.625
Permanent Teacher License	.044	1.242	.036	1.478	1.435	1.030
Other Teacher License	-7.017	3.786	-1.854*	-8.101	4.160	-1.948*

Years of Teaching Exp.	.136	.082	1.655*	.089	.093	.953
Rural Public Teaching Exp.	7.425	4.581	1.621	7.967	4.712	1.691*
Urban Public Teaching Exp.	8.118	4.716	1.721*	7.599	4.712	1.570
Suburban Teaching Exp.	9.213	4.546	2.027**	10.516	4.641	2.266**
Private School Teaching Exp.	3.401	6.343	.536	13.404	7.780	1.723*
School-wide Committee Exp.	2.923	1.416	2.064**	2.761	1.636	1.688*
Observation/Evaluation Exp.	1.565	1.403	1.115	1.952	1.652	1.182
Years as Principal	.283	.081	3.495***	.194	.096	2.029**
Middle/Junior High Principal	3.390	1.834	1.848*	5.511	2.161	2.550**
Elementary Principal	.153	1.536	.099	2.825	1.801	.119
Multilevel Principal	1.080	2.609	.414	1.057	3.207	.330
Military Exp.	5.294	3.199	1.655	4.227	3.556	1.188
Business Exp.	1.475	2.123	.695	-.238	2.437	-.098
Social Service Exp.	3.944	4.228	.933	1.735	4.579	.379
Other Exp.	1.973	3.198	.617	.812	3.570	.227
No Exp. (other than teaching)	1.865	3.198	.957	1.097	2.173	.505
% African-American	----	----	----	.154	.070	2.196**
% Hispanic	----	----	----	-.437	.204	-2.143**
Asian	----	----	----	-.326	.617	-.528
% Native American	----	----	----	.813	4.923	.165
% Multiracial	----	----	----	.006	.357	.016
% Free/Reduced Meals	----	----	----	-.035	.061	-.576
Rural/ag-hi poverty	----	----	----	4.075	4.802	.849
Rural/ag- low poverty	----	----	----	4.329	4.776	.906
Rural/small town-low	----	----	----	.025	4.845	.005

poverty						
Smaller Urban—high	-----	-----	-----	4.277	5.404	.791
poverty						
Suburban-low poverty	-----	-----	-----	3.829	4.453	.860
	Valid n= 334 Adj. R ² = .172			Valid n= 221 Adj. R ² = .300		

Notes: *Significant at .10; **Significant at .05; ***Significant at .01

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