

Analysis of School Leaders Licensure Assessment Content Category I-V Scores and Principal Internship Mentor's Assessment Scores for Standards 1-5

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Abstract

This study compared SLLA sub-scores with assessment sub-scores for a principal internship evaluation instrument at a University in the Southeast region of the United States. The results of the study will be used to help establish the effectiveness of the current principal internship program, performance on the School Leaders Licensure Assessment, and provide suggestions for program improvement. The researchers compared the sub-scores for the multiple choice section of the SLLA with sub-scores from the university's principal internship mentors assessment to look for correlations between the two data sets. The results indicated a small positive correlation in one area of the study.

Keywords: SLLA, SLLA Content Categories, Principal Internship Assessment, Principal Licensure, Program Improvement, School Leadership Preparation.

Introduction

Standards and assessments are the foundations for nearly every initiative in modern education reform. They are the driving forces for improvements in higher education particularly programs that prepare candidates for the role of school principal. The Interstate School Leaders Licensure Consortium (ISLLC) standards were designed to provide the framework for the preparation of school principals (Hessel and Holloway, 2002). There has been a call for some time to reform how school leaders are prepared (Murphy, 2001; Bottoms & O'Neill, 2001; Hale & Moorman, 2003; Barnette, 2004; Hess & Kelly, 2005; Levine, 2005; Mitgang, 2012; & The National Policy Board for Educational Administration, 2002). "It's time for the nation to emphasize training the next generation of school leaders," (Aarons, 2010, p. 1). The complex terrain of 21st Century educational leadership preparation must be investigated for optimal program improvement.

Real reform does not exist when there is a lack of accountability for the program learning outcomes. One suggestion is for programs to study their own data and use the results to make improvements. National and regional accrediting agencies are now requiring this type of research. The Council of Accreditation for Educator Preparation (CAEP) and the Southern Association for Colleges and Schools (SACS) have mandates to use student learning outcomes as key elements in supporting program improvement initiatives. Without qualitative and quantitative research practices, it is unlikely program improvement can occur. Research practices can also be applied to the outcomes for educational leadership programs as examined by School Leaders Licensure Assessment (SLLA) scores.

Reporting of sub-scores for the SLLA is fairly new, having been reported to colleges and university annual reports from Educational Testing Services (ETS) since the 2009-2010 testing cycle.

These scores provide principal preparation programs with a wealth of new data to conduct research, particularly for those programs that claim the Interstate School Leaders Licensure Consortium (ISLLC) standards as their learning outcomes. The ISLLC standards are recognized by national and regional accrediting bodies, state departments of education, and by the principal preparation field for providing the foundation for program learning outcomes. The availability of SLLA Content Categories I-V scores provides a key database for the study of principal preparation program outcomes.

Purpose

This study looks at the relationship of five variables found in the SLLA compared to five variables on an independent performance indicator, the Principal Internship Mentor's Assessment (PIMA), for educational leadership graduate students at a University in the Southeast region of the United States. Surprisingly, no research was found to assess the performance of principal internship programs as they relate to candidate sub-scores on the SLLA.

The researchers' analyzed evaluation scores for ISLLC Standards 1-5 received during the internship by mentoring principals on the PIMA compared to student results from Content Categories I-V found in the SLLA. The results of the study will be used to help establish the effectiveness of the current educational leadership (principal) preparation program, provide valid suggestions for improvement, and recommendations for further study.

Definition of Terms

Standards

Standards are statements that describe program learning outcomes and provide the foundation for curriculum, instruction, and assessment (Guskey & Jung, 2013).

Interstate School Leaders Licensure Consortium (ISLLC) standards

The ISLLC produced six standards where the success of students is paramount (Council of Chief State School Officers, 1996). These standards are research-based with the knowledge, dispositions, and performances necessary for exemplary school leadership (Engler, 2004). When taken as a whole, they are aligned with four broad themes: a vision for success, a focus on teaching and learning, an involvement of all stakeholders, and a demonstration of ethical behavior (Hessel & Holloway, 2002). These themes do not work in isolation, but in concert, with successful school leaders.

The six standards are identified as: (1) the vision for learning; (2) the culture of teaching and learning; (3) the management of learning; (4) relationships with the broader community to foster learning; (5) integrity, fairness, and ethics in learning; and (6) the political, social, economic, legal, and cultural context of learning (Council of Chief State School Officers, 1996). Ellet (1999) and Reese & Tannenbaum (1999) report, that the SLLA designers used the ISLLC standards to construct the instrument.

Principal Internship Mentor's Assessment (PIMA) Sub-scores (Scores for Standards)

The instrument for measuring student success in the internship for this study is the Principal Internship Mentor's Assessment (PIMA) (Arroyo, Koonce, & Hanes, 2008). The PIMA is a 24-item Likert-type scale instrument derived from the ISLLC standards. There are four items per standard (total six standards) with each item rated on a 5-point scale ranging from "fails to address/no evidence of knowledge, understanding, and/or application" to "very specific/convincing evidence of knowledge, understanding, and/or application" (Hessel & Holloway, 2002, p.24). All assessment items are taken from "Components of Professional Practice for School Leaders" (p.27). Each sub-score on the PIMA is directly linked to a correlating ISLLC standard. For this study, PIMA Standards 1-5 will be used.

School Leaders Licensure Assessment (SLLA)

The School Leaders Licensure Assessment (SLLA) which is derived from the ISLLC standards is a major test for granting principal certification and/or endorsement in a number of states. The SLLA is used as a measure to determine if "entry-level educational leaders" have the knowledge necessary for their professional practice (Educational Testing Service, 2012, p. 1). The current assessment is divided into two sections, 100 multiple choice questions and 7 constructed response questions.

The officials' corerange for candidates on the SLLA is between 120 and 200 points. Many states use the SLLA as the gateway to licensure approval (Adams & Copeland, 2005). States utilizing the SLLA for licensure/endorsement set their own cut score (Educational Testing Service, 2012-2013). For this study, only Section 1 (Multiple Choice responses) was used.

School Leaders Licensure Assessment Sub-scores (Content Categories I-VI)

The SLLA is grouped into six categories with a separate score for each category. The six categories mirror the six ISLLC standards: (1) vision and goals; (2) teaching and learning; (3) organizational systems and safety; (4) collaborating with key stakeholders; (5) ethics and integrity; and (6) education system (Tannenbaum & Robustelli, 2008). The actual score reported for a candidate on the SLLA is the overall score plus eight sub-scores (categories). There are separate scores for the multiple-choice and constructed-response questions in two of the categories (Educational Testing Services, 2009). This study will utilize only the SLLA scores in Content Categories I-V because Section 1 of the SLLA (Multiple Choice responses) specifically aligns with PIMA Standards 1-5. Constructed response questions (Section 2 of the SLLA) are not used because both ISLLC Standards 2 and 6 are addressed confounding the study.

Rationale and Significance of the Study

Reviews are mixed regarding applicability of school leadership training program improvement efforts that are compiled as a result of experimental research (Barnette, 2004). In addition, there is a need to compile a more extensive knowledge base of the relationship between variables that are used to provide assessments for accreditation of educational leadership preparation programs. It is critical that decisions made for program improvement are gathered from various program assessments and reflected in decision making regarding students, instruction, curriculum, and policies (Guskey & Jung, 2013).

Research Questions

1. Is there a correlation between individual sub-scores 1-5 received by students on the Principal Internship Mentor's Assessment, and corresponding sub-scores on the School Leaders Licensure Assessment?

Null Hypotheses

1. There is no correlation between individual sub-scores 1-5 received by students on the Principal Internship Mentor's Assessment, and corresponding sub-scores on the School Leaders Licensure Assessment.

Literature Review

Research is scarce regarding university educational leadership preparation programs that study their own assessment data. This type of research would result in an emerging trajectory of new information for the field. Driving new research are requirements for national accreditation based on outcome measures of students and/or graduates. There is a lack of empirical evidence to document measures for correlating the SLLA sub-scores with another variable, particularly with a principal internship mentor's assessment. Literature from the field include, a recent study correlating overall SLLA scores with the PIMA. No studies were found that address SLLA scores or principal internship evaluation.

Kelly & Koonce (2012) found no correlation between SLLA overall scores and the PIMA and recommended further study for correlating sub-scores on the PIMA with sub-scores on the SLLA. Barnette (2004) called for assessments that involve the ISLLC standards be authentic. Kelly and Koonce's studied PIMA scores derived from practicing principals in the field. Both instruments provide measures for the five ISLLC standards (Hessells and Holloway, 2002 & Kelly & Koonce, 2012). These kinds of structured studies provide credibility and authenticity for evaluation of school leadership preparation (Barnette, 2004).

Although there is a lack of studies regarding principal internship outcomes, there are numerous reports on the importance of quality field experiences that are based on the ISLLC standards (Southern Region Education Board, 2005; Southern Region Education Board 2007; Davis, Darling-Hammond, LaPointe & Meyerson, 2005; Davis, Darling-Hammond, LaPointe & Meyerson, 2007; & Hernandez, Roberts & Menchaca, 2012). The current study addresses this void in the literature.

Summary

Although university professors in educational leadership preparation programs conduct much research, very little is directed at data available from their own programs. The landscape is changing as accreditation organizations require programs that prepare school leaders study their assessment data to meet claims made about their graduates and quality principle requirements found in accreditation (Teacher Education Accreditation Council, 2012). Two critical assessments for educational leadership programs are sub-scores on the SLLA and evaluation data for the principal internship. The current study will address both to provide results that programs can use for improvement.

Methodology

Participants

A total of seventy-seven (77) graduate students who completed the educational leadership program were studied in this research from a single university in southeast Virginia over a three year period. Not all program completers were included in the research sample, but it does include all program completers who successfully completed the principal internship, took the SLLA assessment at the conclusion of the program, and reported the scores back to the university. Approximately thirty students who were program completers in the date range of the study either did not complete the principal internship, or take the SLLA exam, and were therefore excluded from the dataset and not included in the study.

Participants were not compensated in any form, and they were not interviewed, tested or surveyed beyond the normal program requirements. The participant group makes up a purposeful sample consisting of all students that completed the internship program, and who also took the SLLA assessment between September 2009 and December 2012.

Instruments

Two measures utilized in this study were scores from the five content categories (I-V) found in the SLLA and the six scoring standards (1-5) found in the PIMA. Content categories for both instruments are directly aligned with the five ISLLC standards. Tannenbaum & Robustelli (2008) established content validity for the most recent version of the SLLA through occupational credentialing and a job survey made up of practitioners and experts from the field. Performance standards were broken down for each of the sub-categories. Content validity for the PIMA was established by Cannizzaro (2007). Sets of two raters used the PIMA and discussed the outcomes in their Focus Groups. In addition, a rubric was in use that assured closer alignment with different scorers. Practitioners rated the PIMA similarly. Subjective scoring (inter-rater-reliability/consistency between tests) is helped when usable guidelines for scoring are developed such as the use of the scoring rubric for the PIMA (Koonce & Kelly, 2012).

Data Collection and Analysis

Data were collected using the SLLA sub-scores (Categories I-V) and the sub-scores on the PIMA (Standards 1-5) as identified from the six ISLLC standards. Sub-scores were matched for the two measures, SLLA Category I with PIMA Scoring Standard 1, followed by SLLA II with PIMA 2 and the same matching with remaining Categories III-V and Scoring Standards 3-5.

All data were reviewed for accuracy prior to inclusion in the study. Results for each student on the PIMA and the SLLA were loaded into an excel spreadsheet. Any students who either did not have scores on the PIMA, or sub-scores on the SLLA reported back to the university were removed from the data set. The names of students were then redacted from the spreadsheet and replaced with numeric coding as identifiers. The data set was then uploaded into the Statistical Package for the Social Sciences (SPSS) for analysis.

To test the null-hypothesis that there is no correlation between the student SLLA sub-scores, and the student Principal Internship Mentor's Assessment sub-scores, five separate bivariate correlations were run using Pearson's r in the SPSS software package. Coladarci (et. al 2011) noted that Pearson's r is "by far the most frequently used correlation coefficient in the behavioral sciences." (p. 135). Significance was determined at the 0.05 level. If the Pearson's r test revealed a difference significant at the 0.05 level, the Bonferroni correction to α was implemented (Simon, 2008) to reduce the possibility of a Type I error. In addition, the researchers also reviewed the effect size to help analyze the level of correlation.

Cohen (1988) defined effect sizes as "small, $d = .2$," "medium, $d = .5$," and "large, $d = .8$ ". Thus, a finding of $.2$ would indicate a small correlation between the variables, while a finding of $.8$ or greater would indicate a very large or significant correlation between the two groups.

The five correlations that were analyzed were as follows:

1. SLLA sub-scores for ISLLC Standard I to PIMA sub-scores for ISLLC Standard I.
2. SLLA sub-scores for ISLLC Standard II to PIMA sub-scores for ISLLC Standard II.
3. SLLA sub-scores for ISLLC Standard III to PIMA sub-scores for ISLLC Standard III.
4. SLLA sub-scores for ISLLC Standard IV to PIMA sub-scores for ISLLC Standard IV.
5. SLLA sub-scores for ISLLC Standard V to PIMA sub-scores for ISLLC Standard V.

Findings

SLLA Sub-score I and PIMA Sub-score I

A Pearson’s r correlation coefficient was computed to assess the relationship between student SLLA sub-scores and sub-scores students received by mentoring principals on the Principal Internship Mentor’s Assessment (PIMA) for ISLLC Standard I. Tables 1 and 2 provide the descriptive statistics and a detailed analysis from SPSS.

Table 1

Descriptive Statistics

	Mean	Std. Deviation	N
SLLA 1	10.16	1.857	77
Mean 1	3.41	.499	77

Table 2

Correlations

		SLLA 1	Mean 1
SLLA 1	Pearson Correlation	1	.241*
	Sig. (2-tailed)		.035
	N	77	77
Mean 1	Pearson Correlation	.241*	1
	Sig. (2-tailed)	.035	
	N	77	77

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

The analysis determined that there is a small positive correlation between the two variables, $r = 0.241$, $n = 77$, $p = 0.035$. As the initial test revealed a level of significance at the 0.05 level, the Bonferroni adjustment was applied. Since the researchers were studying 5 separate correlations, the Bonferroni application results in using 0.01 as the level of significance. In the case of ISLLC Standard I, this level ultimately determined that there was no correlation between the two variables, even with a low-medium (0.241) initial effect size. The results indicate that there is no relationship between how a student performs during the internship experience as scored by a mentoring principal for ISLLC Standard I, and the student’s sub-score results on the SLLA for ISLLC Standard I.

SLLA Sub-score II and PIMA Sub-score II

A Pearson’s r correlation coefficient was again computed to assess the relationship between student SLLA sub-scores and sub-scores students received by mentoring principals on the Principal Internship Mentor’s Assessment (PIMA) for ISLLC Standard II. Tables 3 and 4 provide the descriptive statistics and a detailed analysis from SPSS.

Table 3

Descriptive Statistics

	Mean	Std. Deviation	N
SLLA 2	14.96	2.648	77
Mean 2	3.6396	.40135	77

Table 4

Correlations

	SLLA 2	Mean 2
Pearson Correlation	1	.079
SLLA 2 Sig. (2-tailed)		.492
N	77	77
Pearson Correlation	.079	1
Mean 2 Sig. (2-tailed)	.492	
N	77	77

The analysis determined that there is no correlation between the two variables, $r = 0.079$, $n = 77$, $p = 0.492$. The results indicate that there is no relationship between how a student performs during the internship experience as scored by a mentoring principal for ISLLC Standard II, and the student’s sub-score results on the SLLA for ISLLC Standard II.

SLLA Sub-score III and PIMA Sub-score III

Tables 5 and 6 provide the results from the Pearson’s r correlation coefficient computed to assess the relationship between student SLLA sub-scores and sub-scores students received by mentoring principals on the Principal Internship Mentor’s Assessment (PIMA) for ISLLC Standard III.

Table 5

Descriptive Statistics

	Mean	Std. Deviation	N
SLLA 3	9.58	1.559	77
Mean 3	3.57	.394	77

Table 6

Correlations

	SLLA 3	Mean 3
Pearson Correlation	1	.034
SLLA 3 Sig. (2-tailed)		.767
N	77	77
Pearson Correlation	.034	1
Mean 3 Sig. (2-tailed)	.767	
N	77	77

The analysis determined that there is no correlation between the two variables, $r = 0.034$, $n = 77$, $p = 0.767$. The findings indicate that no relationship exists between how a student performs during the internship experience as scored by a mentoring principal for ISLLC Standard III, and the student’s sub-score results on the SLLA for ISLLC Standard III.

SLLA Sub-score IV and PIMA Sub-score IV

Pearson’s r correlation coefficient was again computed to assess the relationship between student SLLA sub-scores and sub-scores students received by mentoring principals on the Principal Internship Mentor’s Assessment (PIMA) for ISLLC Standard IV. The results are displayed in tables 7 and 8.

Table 7

Descriptive Statistics

	Mean	Std. Deviation	N
SLLA 4	13.21	2.105	77
Mean 4	3.5747	.37938	77

Table 8

Correlations

	SLLA 4	Mean 4
Pearson Correlation	1	-.007
SLLA 4 Sig. (2-tailed)		.950
N	77	77
Pearson Correlation	-.007	1
Mean 4 Sig. (2-tailed)	.950	
N	77	77

The findings determined that there is no correlation between the two variables, $r = -0.007$, $n = 77$, $p = 0.950$. No identifiable relationship can be determined between how a student performs during the internship experience as scored by a mentoring principal for ISLLC Standard IV, and the student’s sub-score results on the SLLA for ISLLC Standard IV.

SLLA Sub-score V and PIMA Sub-score V

The final Pearson’s r correlation coefficient was computed to investigate the relationship between student SLLA sub-scores and sub-scores students received by mentoring principals on the Principal Internship Mentor’s Assessment (PIMA) for ISLLC Standard V. The results are displayed in tables 9 and 10.

Table 9

Descriptive Statistics

	Mean	Std. Deviation	N
SLLA 5	12.35	2.005	77
Mean 5	3.78	.354	77

Table 10

Correlations

	SLLA 5	Mean 5
Pearson Correlation	1	-.116
SLLA 5 Sig. (2-tailed)		.314
N	77	77
Pearson Correlation	-.116	1
Mean 5 Sig. (2-tailed)	.314	
N	77	77

The analysis determined that there is no correlation between the two variables, $r = -0.116$, $n = 77$, $p = 0.314$. The results indicate that there is no relationship between how a student performs during the internship experience as scored by a mentoring principal for ISLLC Standard V, and the student’s sub-score results on the SLLA for ISLLC Standard V.

Conclusions and Recommendations

The present study was an attempt to address the lack of research available from university educational leadership preparation programs that study their own assessment data. The researchers compared the sub-scores for the multiple choice section of the SLLA with sub-scores from the university's principal internship mentors assessment to look for correlations between the two data sets. The results indicated a small positive correlation in one area of the study. Although additional relationships were not found it is recommended that other quantitative measures be reviewed to study SLLA sub scores and PIMA sub scores that may lead to program improvement. This study is representative of a future surge in authentic assessment practices for educational leadership preparation programs. Accreditation requirements and a call to prepare better school leaders was a driving factor in this study.

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