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School Constituents' Ratings of the Leadership Dimensions of High-Performing Principals Based on School Regions

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Introduction

It is customary that entities providing services on a national basis are usually grouped in a manner to optimize their effectiveness. For education systems internationally, schools are usually grouped by political divisions, for example, school districts in United States of America and school regions in England. The apportionment may, however, be done based on the number of schools across political divisions, which is the case in Jamaica and other Caribbean countries. And specifically in Jamaica, schools are placed in six regions which involve one to three parishes, but in one instance, two regions are partially located in one parish.

While schools in any jurisdiction should perform in accordance with stated standards and established criteria, there are many factors which seem to mitigate against this expectation. This failure usually results in weaker schools located in some regions whose performance differ based on factors such as location-urban versus rural, the levels and types of schools, the overall population of these schools, and quality of human resources, including teachers and principals, among others. The school system in Jamaica is divided into six regions, regions 1 to 6. Region 1 comprises three adjoining parishes, Kingston, St Andrew and St Thomas. The other four regions are mainly in rural areas, although, each of these regions has a parish capital and a number of townships which would allow the school to be designated as an urban or suburban location. In other words, five of the regions are essentially in rural Jamaica, except region 1 and even then substantial parts of St Andrew are rural and St Thomas is fully rural (see Table 1).

Jamaica is a small country with a population of 2.7 million people. It is a developing country with an education system facing many problems regarding student performance and meeting the skills needs of the workforce. The Task Force on Educational Reform (2005) explained that the main purpose for the dividing of schools based on regions was to "monitor school performance and to provide specialist support to schools" (p. 37). A good understanding of the factors underpinning leadership practices and behaviours in the regionally-divided schools is necessary for policy makers

and principals alike to influence the performance of schools. These underpinning factors include the level of wealth available to parents, the quality of school facilities, and the levels of support provided by the community, among others.

The fact that school are located in mainly rural settings means that the leadership displayed by the principal will be influenced by the given context and his/her ability to use personal abilities and characteristics to influence change. It should be noted too, that the premium placed on education may not be the same in rural as opposed urban areas. For example, the programme which investigated the high level of absenteeism in the Jamaican school system, identified the limited value placed on education by some parents from rural Jamaica as one factor (Jennings, Cook, Hutton, Anderson & Ezenne, 2011).

The study seeks to determine if school constituents' ratings of the leadership dimensions of high-performing principals based on the regional location of schools. A knowledge of the ratings of high-performing principals is important because the leadership provided by the principal is central to school performance generally. As widely reported and asserted in the literature, leadership is the second most important factor impacting students' outcomes and school performance outside that of the role of teachers and teaching (Marzano, Waters & McNulty, 2005). If principals receive a positive rating on the performance factors on a regional basis, it could be assumed that schools are performing at least in a similar fashion across the country and need to maintain or further improve performance. However, if overall performance is weak, then all regions have to be targeted with adequate and appropriate interventions in order to realize general improvement in school performance. In a case where the findings are mixed across the regions in terms of the ratings of high-performing principals, further studies will have to be conducted to determine what other factors are influencing performance regionally.

The paper locates the study of high-performing principal in the Jamaican school context and provides a review of the relevant literature with emphasis on the phases of leadership development and the four dimensions related to the performance of high-performing principals. The overview of the methodology presents the sample,

procedures and statistical tests which were used and the findings presented and discussed in regards to the four dimensions related to the performance of high-performing principals. The conclusion makes specific suggestions and recommendations regarding strategies and approaches to address some of the problems related to the differences in the ratings of the performance dimensions of high-performing principals based on school regions.

The design of this quantitative study is based on the results of an earlier exploratory case study which was conducted to identify the characteristics, qualities and abilities of high-performing principals in the Jamaica school system. The study targeted regional directors who had supervisory responsibility for the school system in Jamaica and the principals who led and managed schools. Along with the senior directors or territorial officers, regional directors were asked to identify the high-performing principals from the three categories of schools in the Jamaican school system—primary, all age and primary and junior high; traditional high schools; and upgraded secondary or high schools. The criteria used in the selection of the high-performing principals were based on the indicators of effective school leadership stipulated by Reynolds (2003). The indicators include (a) emphasizing the mission as articulated by the school community, (b) focusing on instructional leadership with emphasis on teaching and learning, (c) embracing a strong relationships with both community and parents, (d) facilitating key constituents including staff, parents and others in the active participation in the programmatic activities of the school, (e) establishing a hands-on monitoring approach to both staff and school performance, and (f) facilitating the improvement of the academic performance of students. And based on their day-to-day engagement with the schools, regional directors and their teams were also encouraged to use those experiences to identify and select high-performing principals.

Table 1

The Distribution of High-Performing Principals Based on School Types and Regions

Region	SCHOOL TYPE			
	Newly Upgraded Secondary	Traditional and Technical High	Primary, All Age and Primary & Junior High	TOTAL
1	7	9	9	25
2	4	4	9	17
3	2	2	9	13
4	3	2	8	13
5	4	4	19	27
6	9	5	16	30
Total	29	26	70	125
Distribution of HPPs (%)	23.2	20.8	56.0	100.0
Total No. of Schools Based on School Types	109	52	838	999
Distribution of HPPs Based on School Types (%)	26.6	50.0	8.35	12.51

Note. Reproduced from "Interpreting the Demographic Variables Related to High-Performing Principals in the Public Education System in Jamaica" by Hutton, 2013, *Journal of Commonwealth Council for Educational Administration and Management*, 41, p. 62.

Review of Relevant Literature

Leadership Overview

The role of leadership in the performance of organizations is well documented, but the effort to have a unified understanding of or position on this phenomenon continues to be challenging. Yukl (2013), referring to the work already done by behavioural scientists and practitioners, concluded that they "seem to believe leadership is a real phenomenon that is important for the effectiveness of organizations. Interest in the subject continues to increase, and the deluge of articles and books about leadership shows no sign of abating" (p. 21). Gorton, Alston and Snowden acknowledged the limitations of the research output said that even though "these efforts have, in many instances, provided insights into the subject of leadership the concept remains elusive"

(p. 4). Davila, Holland and Jones (2012) anticipating the new direction for school leadership said that "As principals converge from the task dimension into the human dimension, it becomes essential to prepare future leaders not only in the managerial aspects of leadership, but necessitates training on interpersonal skills and abilities" (p. 2). The difficulty of this task is addressed by Rossow (1990) who acknowledged that it is firmly established that the role of the principal is central to how effective schools performance, but there is no agreement on the factors which are responsible for the effective performance. Each study seems to emphasize a different set of factors associated with effective principalship. The important observation made by Rossow is that, based on the nature of school, the environment which is ever changing and becoming more complex, may be part of the explanation for the elusive nature of leadership. So the work towards understanding the essential characteristics of effective leadership will continue through research and practice (Sergiovanni, 2009), but only time will determine how successful these efforts will become.

Early Leadership Studies

The study of leadership has gone through a number of phases with traits leadership being the first of three phases. Bass and Bass (2008) addressed the nature of the trait leadership and pointed out that "Until the 1940s, much research about leaders and leadership focused on individual traits. Leaders were seen as different from nonleaders in various attributes and tested personality traits" (p. 50). But the focus on trait leadership fell out of favour because of the difficulty in articulating in a consistent way the difference between leaders and nonleaders based on traits alone. Stogdill (1948), however, established in his review of studies on traits that the impact became more apparent when coupled with what the leaders do. By establishing the link between traits and effective leadership, Hoy and Miskel (2005) placed traits into three categories (a) personality, which includes self-confidence, stress tolerance, emotional maturity and integrity; (b) motivation, which includes power needs, task and interpersonal needs, expectations and achievement orientation; and (c) skills, which include technical, interpersonal and conceptual skills.

For the second phase of leadership study, the emphasis was placed on examining leadership behaviours; that is, what leaders do in order to become effective. The three studies which exemplifies this approach are the Iowa, the Ohio State and the Michigan Studies. What is significant about these three studies is that they demonstrate that effective leadership is about both the job and how well it is performed but also the need for consistent attention given to relationships or people concerns. In all three studies, worker performance improved when the human side of the work environment was given the appropriate and necessary attention (Hoy & Miskel, 2013; Lunenburg & Ornstein, 2012; Hanson, 2003).

The third phase of leadership studies was associated with the given situation or context in which leadership is practiced. For this approach, the emphasis of leadership is on the interaction of psychological traits (which is regaining its standing as an important factor of leadership), and the behaviours of leaders based on the actual situations, which focus significantly around contingency and situational leadership (Lunenburg & Ornstein, 2012). Gardner (2013) speaks to the broad setting that leadership has to function and contents that "The historical moment is the broadest context affecting the emergence and functioning of leaders, but immensely diverse settings of a more modest nature clearly affect leadership" (p. 23). Addressing some of the factors which will impact leadership styles and behaviours of those who are being led, Gardner identified "the age level of the individuals to be led; their educational background and competence; the size, homogeneity, and cohesiveness of the group; the motivation and morale; its rate of turnover; and so on" (p. 23). So it should not be surprising that Owings and Kaplan (2012) asserted that "the same leadership behaviour style is not likely to work well in all situations. If leaders are to be effective, behaviours must be relevant to the situation at hand." (p. 21).

Leadership and School Performance

Effective Leadership Factors

Identifying those factors associated with effective schools has been the focus of extensive research for the past six decades, and three have been highlighted. Coleman (1966) was credited for conducting the first full-fledged research and investigation

which looked at the role schools played in the performance of students. The findings of his study revealed that family background was a central factor explaining students' academic achievement and in fact the role of schools had a limited, if any, impact at all. But these findings were challenged by a number of studies done in the 1970s which demonstrated beyond any doubt that a relationship did exist between school achievement and school improvement (Gamage, Adams & McCormack, 2009). The second important revelation was as a result of the studies conducted during the period of the 1970s which identified the critical factors associated with school achievement and specifically students' outcomes. Specifically, Edmonds' (1982) own research, and his review of other studies on the issue of student and school performance, revealed that the role of school leadership was a central factor in determining the quality of performance in schools. However, it should be noted that Edmonds placed school leadership among the school factors which were responsible for effective schools and identified them as the correlates of effective schools. Distributed leadership was the third and emerging trend that was identified as critical to school effectiveness and students' performance. As Dinham (2005) said "the focus of attention has moved from leaders to leadership with the importance of delegation, collaboration, trust and empowerment being increasingly recognized" (p. 341).

To achieve consistency in performance, it should be expected that there would be a level of consistency in the leadership behaviours, styles and approaches in order to ensure effective performance of principals across school regions or zones. The fact is that students require the same type of basic academic support and leadership for learning whether the schools are located in rural or urban areas. Related study identifying high-performing principals in the Jamaican school system showed that only 125 or 12.5 percent of 999 principals were identified as high performing. And the distribution among school types was as follows:

a. Traditional high schools 26 out of 52 or 50% were identified as high performing

b. Upgraded secondary schools 29 out of 109 or 27% were identified as high performing, and

c. Primary-type schools 70 out of 838 or 8% were identified as high performing.

(Hutton, 2013)

Systemic Leadership

While leadership has been a necessary and compulsory factor for leaders' capacity and capabilities to be demonstrated, there is also a parallel view which questions the sustainability of the traditional approach to leadership. The view being advanced is that systemic improvement in school and student performance in the future will be based on an overhaul of organizational structures and arrangements to respond to the needs required for effective performance. In articulating this view, Peurach, Holmstrom and Glazer (2008) enunciate the position that "the logic of systemic improvement marks a sharp movement toward the development of schools as rational systems organized to support student achievement" (p. 3). Further, Olson (2008) embraced this view by pointing out that "by approaching leadership as an organizational quality, institutional theory offers a more complex and less hierarchical perspective of social interaction and organizational dynamics than the more dominant technical-rational model" (p. 8).

Leadership Challenges

Gordon and Qiang (2000), describing some of the challenges facing leadership in rural schools, said that "worldwide, enrolment of students in rural areas is far worse than in urban areas; distance, cultural and social factors and poverty all contribute to either preventing families from sending children to school or sending them to school late" (p. 1). Shadreck (2012) looking specifically at one African country indicated that one of the problems facing the education system in rural Zimbabwe, is the difficulty faced with recruiting qualified teachers. This is of importance because as Marzano, Waters & McNulty (2005) pointed out, the single most important factor impacting student learning is the quality of teaching. It should be expected, therefore, that students' learning outcomes may be compromised by some of the factors affecting rural schools and may not be as good as those schools in locations that are able to recruit and maintain quality and qualified teachers.

The Importance of Context

The point of concern and relevance with the data is that the majority of schools are primary types which are located across all six regions, and they are mostly located in the rural areas. But only a small per cent of the principals were identified as high performing. Given the context of the regional division of schools, principals will have to act in response to the specific needs of the constituents in order to impact performance in a meaningful manner. Redding and Walberg (2012) noted, for example, that one feature of rural schools, especially those in remote communities is "their centrality to community life and their ability to engage families" (p. 15). So, this factor will play an important role in how schools are organized in order to realize the same or similar type of performance. On the other hand, Miller and Hutton (2014) discussing the role of personal factors in exercising leadership behaviour said that:

> We propose that how one leader manifests these qualities is deeply personal and one person's interpretation of the strictures, structures and processes may be very different to someone else's given; for example, their background and current social class, understanding of and engagement with educational policies, size and location of a school and philosophy of education. (p. 71)

Making reference to a business setting, Yukl (2013) identified some of the contextual factors as "the characteristics of the followers, the nature of the work performed by the leader's unit, the type of organization, and the nature of the external environment" (p. 29). Barnett, McCormick and Conners (2001) emphasized the need for principals to respond to the internal and external challenges which will be different based on location and school types. Northouse (2013) asserted that the basic requirement for the appropriate leadership style to be applied is based on the context or situation that is presented, that is, leaders have to change their style based on the tasks and needs of subordinates. So, in addressing the issue of context, both internal as well as external factors must be taken into consideration. Miller and Hutton (2014) defined internal factors as those which "include personal philosophy, personal qualities and personal values, while external factors are those . . . contextual elements which

each leader must confront whether in private or public settings in the process of achieving organizational goals, such as better outcomes for students" (p. 72).

Philosophy and Personal Factors

Further expanding on the role of personal leadership factors, Ashby and Krug (1998) poignantly captured the importance of philosophy and beliefs when they asserted that "your philosophy involves values so dear that they guide your life and can never be compromised. These values are so much a part of you that they are obvious in your actions, both at home and at work" (p. 54). Speaking of the importance of beliefs, Green (2010) said that "beliefs about students' ability to learn and their teachers' ability to teach can affect the principals' leadership behaviour and the decisions they make regarding the structure of the instructional programme" (p. 29). Carr (2011) advanced the notion of democracy as a philosophical outlook which should guide one's thinking and action in education. Some of the enduring features involve "inclusion, participation, dialog, interrogation, and critical pedagogy. . . this form of education seeks to embrace the experiences and perspectives of diverse peoples. . ." (p. 38). These perspectives are just a limited selection of what principals believe in and how they are likely to act based on these beliefs. Considering that there are many other philosophical views that different principals may adopt, it is reasonable to conclude that these differences will also be reflected among the dimensions based on school regions, levels or types.

Community Needs

Redding and Walberg (2012) emphasized the necessary role community plays in the performance of schools.   Harmon and Schafft (2009), speaking specifically of required leadership for schools in rural areas of the United States of America (USA), said "that enlightened educational leadership that seriously takes into account the 21st century needs of students – as well as the communities in which they reside – cannot help but interpret academic and community improvement goals as mutually reinforcing priorities" (p. 4).   Elaborating on the impact of this type of approach as a result of his

research on schools in South Africa, Jooste (2008) said that successful rural principals "reported remarkable successes when involving the parents and the community in adopting the schools in their community with the resultant positive effect on discipline and school attendance by both learners and educators" (p. 233).   The role that schools play in the community is also important. Jooste indicated that principals assist the community through providing employable skills and literacy programmes dealing with social problems such as drug use and providing general education on how to function in a democratic society. Hutton (2011) reporting the same type of experience when school leaders seek to develop meaningful community relationship with primary schools said that 'training is provided in basic occupational skills or further education courses that are offered, and, where parental literacy is a problem, high-performing principals seek to provide classes to address it' (p. 64). Underpinning the strengthening of leadership for rural schools in order to achieve effect and impact is one step to consider.

Approaches to Community Governance

Leithwood, Louis, Anderson and Wahlstrom (2004) spoke of the need for a more traditional top down type of leadership for effective functioning in schools located in urban centres or the inner city because of the nature of the challenges facing those schools. This would be different for many schools located in rural communities, especially small schools which have a greater level of integration and relationship among schools, parents and community.

But, while some countries are concentrating and integrating school districts in order to benefit from the economies of scale, others are decentralizing the management of schools as one of the strategies for improving performance, accountability and greater participation by the community in the running of schools. Again, the context is the critical factor at play. Western New York (USA), for example, has fewer school districts because of a policy of consolidating them over the past 30 years (University of Buffalo Regional Institute, 2009). On the other hand, Jamaica has been strengthening its regional entities under which schools are grouped by giving them legal status to operate with some level of independence (Task Force on Educational Reform, 2005).

The main goal is to strengthen accountability, and to improve governance and management. Hutton (2009) indicated that there is doubt about the impact of decentralization, however, Dachi and Alphonce (2010) have shown that "the government's goal of broadening democratic participation and accountability at school level demands increased involvement of the communities . . . has spread the burden of resourcing primary schooling through community initiative" (p. 36).

An examination of leadership performance by high-performing principals in a regional framework will be affected by a variety of factors. Distilling these factors should provide useful information regarding the similarities or differences existing among the regions. A useful theory would be that although leadership styles and behaviours are not expected to be different, the existing context, which involves both internal and external factors may indeed account for the differences in how school constituents determine school performance and school effectiveness.

Method

Sample and Respondents

There were 125 schools selected using quota sampling. They provided a sample population of 2384 respondents for the study of high-performing principals across the island of Jamaica. The returns were obtained from 1523 school constituents represented by 64% of the sample, which constituted 76.5% females and 23.5% males. The majority of the respondents were between the ages 30 – 39 years old. Most of the respondents were employed at a primary, all age, and primary and junior high school (39.3%), while the rest of the sample was represented by upgraded high schools (35.3%) and traditional high schools (25.5%). The data show that over half of the respondents were classified as classroom teachers (51.9%), 19.2% were classified as senior teachers, 8.7% were classified as heads of department and 8.5% were grade coordinators. The remaining constituents who responded were vice principals (6.1%), board chairmen (2.7%), PTA presidents (2.7%) and education officers (0.3%).

Measures Applied

A questionnaire was used to elicit information on principals' leadership performance. The instrument consisted of a demographics section which captured sex, age, position, education level, and number of years working with the principal and the school. The other portion of the instrument consisted of 69 Likert scale items that comprised nine categories. The Likert scale items comprised nine sub-scales of leadership performance. Each item in each scale was rated between 1–5, with 1 denoting strongly agree, and 5 strongly disagree.

Personal philosophy and beliefs sub-scale

This category comprised seven items that rated how principals promote their beliefs within the school, the community and among the learners. Samples of these items included: 'Believes that the learner should at all times be the central focus of the school's initiatives and activities', 'Promotes the belief that formal schooling provides the majority of students the opportunity to achieve a rounded and broad-based education', and 'Promotes education as the main vehicle to assist students to achieve economic and social mobility in the future'.

Personal strengths, qualities and abilities sub-scale

This category comprised eleven items that rated the personal qualities and work ethics of the principal. Samples of items included: 'Demonstrates strong interpersonal skills when dealing with teachers, students and other members of the school community', 'Exhibits a high level of self-confidence in his/her ideas and the possibility of successfully pursuing them', and 'Reflects constantly on the challenges confronting the students and initiates solutions to address these challenges'.

General leadership and management sub-scale

This category comprised ten items which rated how principals lead their school. Samples of these items included: 'Articulates and implements a shared vision of where the school should go, what it should be doing and how it should get there', 'Involves the staff and other constituents in making important decisions regarding the direction

and operation of the school,' and 'Promotes a culture where continuous achievement is paramount for everyone in the school'.

Academic development and achievement sub-scale

This category comprised seven items, which rated how principals implement initiatives that improve academic outcomes. Samples of items included: 'Institutes curricula and programme options comparable to traditional high schools (sixth form, music option, etc.)' and 'Initiates promptly, relevant intervention strategies to solve specific academic and learning problems identified among students'.

Support for students' development and achievement sub-scale

This category comprised seven items which rated how principals promoted the growth of students. Samples of items included: 'Analyzes students' performance to identify performance deficiencies and to institute strategies to overcome problems identified' and 'Prescribes standards for students' general conduct and insists that they are enforced and maintained at all times'.

Staff development and relationship sub-scale

This category comprised eight items which rated principal's interaction and support of staff. Samples of items included: 'Engenders the commitment of all levels of staff to achieve the performance targets of the school' and 'Consults with teachers and other constituents to address issues and problems that may face the school'.

Community development and relationship sub-scale

This category comprised eight items which rated how principals engaged with the various communities to promote school development. Samples of items included: 'Develops active involvement with the business community to garner support for the school's activities' and 'Builds and sustains a community of support for the performance and achievement of the school'.

Relationship with Formal Structure sub-scale

This category comprised five items which rated how principals related to the central ministry and regional offices. Samples of these items included: 'Establishes strong relationship with MOE officials who can be called on for assistance when necessary' and 'Challenges MOE policies and guidelines which prevents the school from

meeting its planned objectives or retard initiatives, even at the risk of been sanctioned by the MOE.'

Plant and facilities and management sub-scale

This construct consisted of six items which assessed how principals engaged in changes in the school's physical environment. Samples of items included: 'Implements new technology and equipment to facilitate teaching and learning' and 'Implements programmes which attend to the environmental needs of school (for example: tree planting, creating flower gardens, etc.)'.

Procedure

The questionnaires were both mailed or hand delivered to all 125 schools identified with high-performing principals over a four-month period. The questionnaires were administered to the respondents by a designated teacher within each school who also collected and returned the instruments upon completion. Respondents were allowed to keep the instruments for a maximum of three weeks. In cases where the administration of the questionnaire was delayed, the researcher made phone calls to the respective principals and/or designated teachers with the aim of advancing the completion of the data collection process. The completed instruments were returned via mail by the designated teacher or collected from the school by the researcher.

Reliability Results

In order to determine the reliability or internal consistency of the items used to rate the performance of high-performing principals, the Cronbach's alpha statistic test was applied. This test was selected because of the high confidence researchers have in its ability to measure the strength of internal consistency of a set of scale or concepts being studied. The results of Item Analysis presented in Table 2 shows that all but one of the 9 sub-scales had high internal consistency. The factor; 'Relationship with the formal structure' was relatively low with a C-Alpha of .596; consequently, it was removed (see table 2). Based on the result of the Item Analysis test, the category

'Relationship with the formal structure' was eliminated because it did not meet the

minimum standard required for the acceptable reliability (Wiersma & Jurs, 2009).

Table 2

Test of Reliability of the Categories of Factors Representing the Performance of High-Performing Principals

Categories of factors	Cronbach's Alpha
1. Shares Personal Philosophy	.869
2. Personal Strengths, Qualities and Abilities	.910
3. General Leadership and Management Skills	.914
4. Academic Development and Achievement	.800
5. Students Development and Achievement	.868
6. Staff Development and Relationship	.887
7. Community Development and Relationship	.882
8. Plant and Facilities Maintenance and Development	.737
9. Relationship with the Formal Structure	.596

Note. The category 'relationship with the formal structure' was eliminated from the Cronbach alpha test because it did not meet the minimum standard required for the acceptable reliability (Wiersma & Jurs, 2009).

Data Analysis

The data was cleaned and analysed using the Statistical Package for the Social

Sciences (version 17). Internal consistency tests using the Cronbach's Alpha was

performed on all sub-scales to establish reliability. However, the ninth category

'relationship with the formal structure' was removed because it did not meet the

minimum standard for test of reliability). Within the context of this study, principal

component analysis (PCA) was used to test the theoretical premise that leadership

performance could be explained by a number of factors. Note that the reason for

applying the PCA is its capacity to identify the smallest number of uncorrelated variables

which will explain a large number of variables obtained from the data set. (The

uncorrelated variables are referred to as principal components.) So the PCA is used to

reduce the number of variables encountered which makes for more manageable and succinct analysis, discussion and interpretation of the findings. For this study, the PCA was used to determine which component(s) accounted for the variance in the correlation matrix generated from this sample. Once the factors were obtained from the PCA, they were correlated with each other to ascertain how closely associated these factors were. Prior to performing the principal component analysis, the suitability of the data for this analysis was assessed using inter-correlations between the items in the instrument. Note that the PCA generated eleven components with eigenvalues exceeding 1 and explained 64.8% of the variation in the correlation matrix. The varimax rotation which was used to interpret the components derived from the PCA showed that only four components had strong and consistent item loadings. These four components explained 51.1% of the variance in the correlation matrix which included the following: Personal Philosophies and Abilities, Leadership and Management, Student Support Systems, and School/Community Support and Relationship. The one-way ANOVA was used to determine whether there are any significant differences between the means of the three types of schools related to each of the four subscales or performance dimensions.

Results

A one-way ANOVA between groups was performed to examine the differences in the scores on the Principal Leadership Performance Scale between region 1 through to region 6. The Levene's test showed that equality of variances was not assumed for four dimensions in the analysis. Results showed that there were differences between region 1, region 2, region 3, region 4, region 5 and region 6 on all four dimensions – personal philosophy and abilities [$F_{(5, 1613)} = 9.072$, $p=.000$]; leadership and management [$F_{(5, 1609)} = 13.165$, $p=.000$]; student support systems [$F_{(5, 1603)} = 9.794$, $p=.000$]; and school/community support and relationships [$F_{(5, 1609)} = 4.294$, $p=.001$].

Post hoc comparisons using the Games-Howell test showed that there were differences in scores on the personal philosophy and abilities sub-scale between region 1 (M=78.7, SD=13.2) and region 4 (M=83.9, SD=8.7); region 1 and region 5 (M=83.6,

SD=7.5); region 2 (M=79.6, SD=13), region 4 and region 5; region 3 (M=79, SD=11.9), region 4 and region 5; and region 6 (M=80.1, SD=11), region 4 and region 5. There were no differences in scores between regions 1, 2 and 3 on this scale. In relation to the leadership and management sub-scale there were differences between region 1 (M=32.2, SD=7.1), region 4 (M=35.7, SD=5.1) and region 5 (M=35, SD=5.3); region 2 (M=31.8, SD=7.2), region 4 and region 5; and region 3 (M=31.2, SD=7.4), region 4 and region 5. Additionally, there were also differences between region 6 (M=32.3, SD=7.2), region 4 and region 5 on the leadership sub-scale.

On the third sub-scale of student support systems there were differences between region 1 (M=21.6, SD=4.1), region 2 (M=22.8, SD=3), region 4 (M=23.2, SD=2.4) and region 5 (M=23.1, SD=2.7). Additionally, there were also differences between region 3 (M=22.2, SD=3) and region 4, as well and as region 6 (M=21.9, SD=3.9), region 4 and region 5. Differences were also documented in the last sub-scale – school-couunity support and relationships. Region 1 (M=30.3, SD=7) and region 4 (M=32.5, SD=5.8), region 1 and region 5 (M=32.1, SD=6.4), as well as region 6 (M=30.7, SD=6.7) and region 4. The strength of the differences between the six regions as measured by the eta square (η^2) showed that differences in scores between groups were very weak on all dimensions (see Table 3).

Table 3

A One Way Between-group of Analysis of Variance for Leadership Performance Dimensions Related to Region Levels

Dimensions	Levels (Regions)						*F*	η^2
	Region 1	Region 2	Region 3	Region4	Region 5	Region 6		
Personal Philosophy and Abilities	78.7	79.6	79	83.9	83.6	80	9.072*	0.03
	(13.2)	(13)	(11.9)	8.7	7.5	(11)		
Leadership and Management	32.2	31.8	31.2	35.7	35	32.3	13.165*	0.04
	(7.1)	(7.2)	(7.4)	(5.1)	(5.3)	(7.2)		
Student Support Systems	21.6	22.8	22.2	23.2	35	32.3	9.794*	0.03
	(4.1)	(3)	(3)	(2.4)	(2.7)	(3.9)		
School/Community Support and Relationship	30.3	30.6	30.2	32.5	32.1	30.7	4.249*	0.01
	(7)	(6)	(6.8)	(5.8)	(6.4)	(6.7)		

Note. * = *p* ≤.05. Standard Deviations appear in parentheses below means.

Discussion

The findings indicated that there were differences in how constituents rated the four dimensions related to the performance of high-performing principals in all six school regions; however, the differences were weak. It is a reasonable deduction to advance that one factor resulting in this finding is related to the context in which the schools exist in the Jamaican landscape. Some of the contextual factors would include socioeconomic challenges, the type of schools, type of students, location of schools (rural versus urban) and the nature of leadership that is in operation. So, while one should expect similarities in the ratings of high-performing principals, because of the need to apply similar skills to address issues related to student performance and outcomes, the prevailing context may be a more potent factor influencing how high-performing principals address the four dimensions of performance.

For the dimension of personal philosophy and abilities, the difference between was split among regions. There was no clear pattern explaining the differences or similarities in the ratings of this dimension by the high-performing principals. But previous research conducted revealed that personal factors such as philosophy and abilities define or influence one's leader (Hutton, 2017; Miller & Hutton, 2014). In other words, the individualized nature of personal philosophy and abilities will necessarily impact the performance of high-performing principals. On the other hand, the fact that there is no difference between regions 1, 2 and 3 suggests that there was consistency in the way the leaders used personal factors to drive the performance of schools and students. It should not be surprising that Ashby and Krug (1998) and Green (2010) concluded that schools are led by principals who will influence the process based on their own values and belief system.

So while there were similarities for three of the regions regarding the dimension of personal philosophy and abilities, for the dimension of school/community support and relationships there were significant differences in the ratings of high-performing principals, even though the differences were weak. The influence of community on schools seems to be greater in the rural areas (Redding & Walberg, 2012; Harmon &

Schafft, 2009). Generally, the physical community in which the schools are located represents a stable source of support. This is especially true of primary and related schools which serve specific communities that are in close proximity. However, the nature of the school/community support and relationships may differ among rural, suburban and urban areas. For example, region 1 and aspects of region 2, 4 and 6, which have larger town centers were expected to have more support from professionals and businesses located in the urban areas. On the other hand, in those regions where schools were located in the rural areas, the support for schools may be coming from small farmers, churches, individuals from the community, and also parents. Note that the support from parents would be found across all areas in each region.

In the area of leadership, the differences were also evident between and among regions. The contextual factors which may vary to a great extent across regions continue to play an important role in how school leaders make decisions and perform their roles and functions. Yukl (2013) identified both internal factors such as the type of organization, and external factors such as the nature of the external environment. Barnett, McCormick and Conners (2001) also pointed out that there are both internal and external factors affecting leadership that is based on location, school types and resources, and other types of factors. Leithwood, Louis, Anderson and Wahlstrom (2004) spoke of the need to apply a more direct and traditional form of leadership, especially in inner city schools because of the requirements for success in these types of school. Further, the nature of leadership and its effectiveness is also demonstrated through personal internal factors such as values, norms, beliefs and abilities and skill sets acquired to perform as principals (Hutton, 2017; Miller & Hutton, 2014).

Regarding the dimension of student support system, the differences were evident across the regions and suggest that there was no uniformity in the quality and level of support that was provided by school leaders for schools. This could also be a reflection of the types of schools involved. The schools which are well established among all school types usually have well developed support systems for students. This is especially true for the traditional secondary schools, some of which have been in

existence for over 200 hundred years (Miller, 1999). From a regional perspective, and especially the rural areas, the vast majority of schools are primary and related schools but greater emphasis regarding student support is placed on traditional high schools and to a lesser extent the upgraded secondary schools, which are located in the main urban and suburban centers.

Conclusion

The relationship between regions and the four dimensions related to the leadership performance of high-performing principals has shown significant differences between and among regions. While variation of constituents' ratings of the four dimensions of leadership may not be the best measure of the principals' capacity, these ratings should provide some insights into their effectiveness. What may also account for this difference are the contextual factors which affect different and the ability of schools to deal with these factors vary significantly. So given the contextual limitations and influences, the question is to what extent can principals overcome these challenges in order for their schools to achieve effective performance? The fact is that contextual factors are not insurmountable; therefore, they should not be allowed to dictate the level of performance that schools or principals can accomplish.

It is necessary that the contextual factors impacting students' performance negatively be addressed not only by the principals who are in charge of the day-to-day running of schools but also central ministry which owns schools. Some of the contextual factors include: quality of teachers; condition of school plants; location—rural vs rural; inadequate resources to run schools; cost of travel and transportation, especially in rural areas; income gap facing parent, among others. It is these and other factors fueling for the problems such as absenteeism, which is usually more prevalent in rural schools. Additionally, principals who are selected to operate schools must have the required skill sets, experience, and maturity to function effectively six across all regions, despite the challenges.

The data presented show that the vast majority of schools are primary-type schools, which are mainly located in rural areas throughout the six school regions. And

in comparison to traditional and upgraded high schools, less than 10 percent of the principals were identified as high performing. It means that effective in-service training must be provided in order to transform leadership behaviour among this category of school leaders. Similarly, adequate pre-service programmes for preparing school leaders are also necessary in order to increase the number and percentage of high-performing principals in the school system over the next 10 years. So instead of the paltry number of principals now identified as high performing, the majority will be identified as such by then. Also, it is important that high-performing principals apply new strategies to overcome some of the limitations imposed by the contextual factors. In fact, it will be the strengthening of the dimensions related to effective performance of principals that will assist them in making the transition from the limitations caused by contextual factors to achieving targeted student outcomes.

Finally, there is need to conduct further research in order to have a better understanding of the impact of the contextual factors on school performance. Having a better knowledge of how these factors influence school performance will allow policy makers and practitioners to be much more targeted in applying adequate remedies. In addition, further research should be conducted on the strategies and techniques being applied by high-performing principals to successfully address the contextual factors. It is this type of information that will assist schools across regions to perform with greater consistency in meeting school goals and performance targets. The long-term implication is an increasing reliance on systemic leadership while the need for the high-performing principal who is the top performer will decline in importance over time. Systemic leadership assumes greater integration of the operational elements including relationship building, distributed leadership, up-to-date legal framework, networking, professional development, among others.

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