The Impact of Covid 19 on School Administrators' Leadership Attributes in Selected Schools in Jamaica

Karla Boswell-Lewis^{1*}, Disraeli Hutton¹, Devon Crossfield²

 ¹School of Research, Texila American University, City One, Country One
 ²School of Education, University of the West Indies, Kingston, Jamaica
 ²Department of Graduate Studies & Leadership, Northern Caribbean University, Mandeville, Jamaica

Abstract

Principals have been called upon to utilize their personal leadership resources in Jamaican schools during the novel Corona Virus pandemic. This crisis has forced a radical shift in the landscape of school leadership and management not only in Jamaica but globally. The purpose of this descriptive quantitative study was to ascertain the impact of Covid-19 on principals' level of compassion and care, openness and communication, adaptiveness, resilience and courage, consultation and collaboration, empowerment, and decisiveness. Additionally, it sought to assess whether there were differences in these leadership attributes based on school level, region, and gender. A 24-item questionnaire developed and validated by Balasubramanian and Fernandes (2022) and achieved an overall Cronbach Alpha of .84 was used to collect data. The sample included 50 principals and vice principals selected conveniently from the 7 regions 18 completed and returned the questionnaire, 15 females and 3 males. The data were coded and imported into the SPSS, version 27, and were screened, cleaned, and analyzed using weighted means and standard deviations and MANOVA. The mean ranges for interpretation include: 1.00 - 2.33 =Low Attribute; 2.34 - 3.67 = Moderate Attribute and 3.68 - 5.00 = High Attribute. The results showed that the principal participants scored high on leadership attributes. These findings hold critical and practical lessons for handling future crises. They show that effective leaders in many schools can function effectively in a crisis given that the policy makers provide adequate guidance and regulations with a relevant resources.

Keywords: Adaptiveness, Compassion and care, Consultation and collaboration, Empowerment and Decisiveness, Openness and Communication, Resilience, and Courage.

Introduction

Personal leadership resources are required in schools during a crisis situation such as the novel Corona Virus pandemic. The Covid-19 pandemic has forced a radical shift in the landscape of school leadership and management globally. This global transition to virtual education is novel, as school leaders are required to shift focus from traditional modalities of teaching and learning to virtual learning modalities [1]. This sudden transition is now called the new normal that educational leaders are forced to influence change in [2-4]. Thus, the roles and responsibilities of educational leaders have forced educational leaders to utilize their personal leadership resources. Key among these resources were compassion and care; openness and communication; adaptiveness; resilience and courage; consultation and collaboration; empowerment, and decisiveness. At the same time, most educational leaders are said to lack effective skills in utilizing these resources required to inspire and motivate teachers to use practices and professional best support development curriculum necessary in development and implementation in this environment [5]. With this shift to virtual learning, the need was created for educational leaders to understand their own leadership attitudes towards virtual learning since they are the master implementers of the curriculum shift [6]. Hence, their attitudes will shape the school ecosystem and how they implement the virtual curriculum and impact the learning outcomes. The leadership attitudes of principals are of paramount importance since many have been to instantiating virtual learning resistant because of the perceived additional requirements on the educator as opposed to that of traditional face-to-face instruction [7]. However, Covid-19 has created huge changes to the practices of leaders, the vision they have for education, and the nexus between their supervision of teachers and teachers' views of their leadership effectiveness. These changes mean that in education, it cannot be business as usual. Virtual learning seems to be the new normal. Furthermore, leadership in virtual learning is complex and requires collaboration between leaders and teachers to identify barriers and engage in problem-solving activities to address current and emerging barriers.

The change brought on by Covid-19 has forced the Jamaican government to implement emergency adjustments to curricula and their delivery. Many teachers bemoan the fact that there is inadequate support and resources provided to function in the virtual learning classroom by school leaders. Educational leaders are expected to provide the necessary tools teachers need to adapt traditional learning approaches to cater to all student's needs in a virtual setting [8]. Many teachers are of the view that educational leaders are unable to engage them in capacity-building activities that

inspire, influence, motivate and develop their capacity to function in the virtual space. Thus, teachers are at varying levels of adoption and implementation of the virtual learning system in their classrooms. This has contributed to the teachers being stressed and frustrated in the classroom [8]. Thus, effective leadership in virtual learning at all levels of learning environments is even more challenging. Moreso, effective virtual learning has been found to enhance students' learning experiences by overcoming barriers associated with access to resources and support [9]. It is important to identify a leadership model in the literature to benchmark the administrators' e-leadership of virtual learning in their organizations.

This understanding should provide insights into strategies that can be employed to understand the characteristics of effective educational e-leaders. This design will be appropriate to describe effective leaders' characteristics to show the extent to which educational leaders understand their roles as change agents in a technological era. However, the variables will be assessed without manipulation in any form or way. The results from this descriptive research should help policy makers to capture the current conditions of teachers implementing virtual learning and underlying patterns of events. Despite the pivotal role that crisis leadership plays in educational organizations, especially in the wake of Covid-19, there is a scarcity of empirical research in our context. No study was found that examines if differences exist in the influence of demographic characteristics of leaders on their tendency to exhibit leadership traits. Thus, this study contributed to the body of knowledge on this matter.

Related Literature

There is an existing body of global literature on the importance of understanding crisis in the context of education reform, which focuses on economic crisis, natural disasters, and terrorism events [10]. However, international research on school leaders shows a high level of stress and anxiety brought on by crisis situations [11-13]. School principals were found to be affected by the 'ongoing and evolving nature of the crisis and coped by suppressing these feelings in front of staff and students [13]. Compassion and care are said to provide a sense of togetherness during the Covid-19 crisis. It has been positioned that leaders' ability to cultivate and spread a sense of togetherness among workers is essential during the Covid-19 pandemic [14]. That is, leaders should place emphasis on forging a connection instead of correction [15]. Leaders must take time to listen to employee concerns and demonstrate geniuses of care employees' well-being about mentally, emotionally, and physically through connective decisions [15, 16]. The act of empathy and moving compassionately in the skin of employees is vital during Covid-19 as the tragedy was common during this pandemic [17-18]. When leaders practice these attributes, their policy implementation and decisions are made from an advocacy standpoint [17].

Openness and communication have been found to be essential leadership principle when experiencing a crisis, as it assists in inspiring a shared vision in the organization [15, 19]. It has been posited that regular communication in updating employees in a crisis is pivotal to crisis management and a key responsibility of the leader [16]. It helps the leader in making employees feel comfortable in an uncomfortable situation. The situational context should be permeated with honesty and transparency, factuality, frequency, iterativeness, clarity, and directness through multiple channels [16, 19]. Additionally, adaptiveness is critical to effectively operating in Covid-19 adventure due to the level of uncertainty and turbulence it entails. Therefore, leaders must be agile, continually learning and tweaking their responses according to the context, conditions, and situation [16, 20]. This adaptive mindset is required for effective decision-making and critical thinking, inquiring into new processes, restructuring strategies of action, and understanding the situation at hand [16]. This mindset is required to adopt new paradigms in novel situations.

Additionally, resilience and courage have been found to be highly practiced by effective leaders in a crisis situation. When a leader exhibits resilience, obstacles and temporary setbacks are used to forge new pathways [21]. Under duress, resilient leaders utilize courage; make hard decisions and sacrifices which are needed to protect strategic pathways during a novel crisis [15].

The findings on effective school leaders show that these leaders score high in consultation and collaboration. In a novel crisis, leaders must seek the contributions of others in decision-making [22]. With a complex situation such as the Coronavirus pandemic, inclusive decision-making and stakeholder collaboration is needed to achieve strategic goals [16, 23]. Therefore, leaders must be equipped to share knowledge and expertise [24], gathered from internal and external expert colleagues to make informed decisions [15].

Another attribute that effective leaders scored high on is empowerment which signifies that leaders stimulate the self-motivation of subordinates by motivating them to go beyond the call of duty to perform and contribute to the goals of the organization [25]. To cultivate a sense of empowerment, leaders must add value and seriousness to the contribution made by employees to the decision-making process [26] and facilitate employees' creative ideas as contributors through open discussions [25]. At the same time, a decisive way is crucial in any crisis situation for swift response in leadership. Also, directness, strength, and the ability to adopt a lead-role approach is important [18]. A quick response has been a recognized characteristic of decisive educational leadership during the Covid-19 pandemic. Since decisive leadership does not allow time to source employees' input of ideas, the leader must communicate well-defined formulate and

expectations and influence others to assist, in achieving the established priorities without feeling left out of the decision-making process. Therefore, the decisive leader must be prepared to make rapid, high-impact, hard decisions in scarce information settings based on experience, intuition, consensus, and common sense [15].

With regards to the relationship between demographic characteristics and the leadership attributes of compassion and care; openness and communication; adaptiveness; resilience and consultation and collaboration; courage: empowerment; decisiveness, research findings have shown some interesting findings. In terms of the area in which the schools are located, it was suggested that principals who are aware of local socioeconomic levels act in advance of government assistance, such as its systems of providing vouchers [27]. In relation to the level of the education system that the school is found, many authors suggest that from the onset of a crisis, for example, the Covid-19 crisis, the type of organization or situational context of the school became of significant, with schools making decisions on their approaches based on their local community's needs [27]. For gender, a study found that female leaders received higher trust to lead organizations in times of crisis when the female leader displays high levels of relational behaviors and when uncertainty about the crisis's consequences is minimal [28]. Relational qualities always help restore trust in a company.

The author further suggested that female leaders' relational qualities can aid in the rebuilding of trust in an organization more than male leaders' relational qualities during uncertain times. However, only if the crisis is considered to be predictable, controllable, and with low levels of uncertainty. The findings from research on gender stereotypes reported that in times of crisis, stereotypically "female" traits are given more importance for a leader to possess and that stereotypically "male" traits are less desirable [29].

Materials and Methods

The sample of the study included 50 principals and vice principals selected conveniently from the 7 regions that schools are divided into in Jamaica. Out of 50 participants, (36%) completed and returned 18 the questionnaire. Of the 18 participants, there were 15 (83.3%) females, and 3 (16.7%) males. The research was a quantitative approach. The quantitative research approach has been used to assess a myriad of issues in education as a scientific and systematic process that collects data in numerical form to make sense of the complexity of issues [31].

This approach was appropriate to study and understand the impact of Covid-19 on school administrators' leadership effectiveness of virtual learning in an empirical manner. Thus, it will entail the collection and analysis of numerical data with the use of mathematical, statistical tools [32]. A quantitative approach was ideal to describe the variables in a numerical way.

The collected data were analyzed using quantitative statistical tools. The data were coded and imported into the SPSS, version 27. The data were screened, cleaned then analyzed. Descriptive statistics were computed to illustrate the characteristics of the sample and show the spread of the data. Weighted means and standard deviations were computed to ascertain principals' level of compassion and openness communication. care. and adaptiveness, resilience and courage, consultation and collaboration, empowerment, and decisiveness.

The mean ranges for interpretation include: 1.00 - 2.33 = Low Attribute; 2.34 - 3.67 =Moderate Attribute, and 3.68 - 5.00 = High Attribute. Mean, and standard deviation were appropriate statistics as they offer an objective measure of participants' opinions and gives a basis for comparison of participants' perceptions.

Results

Research Question 1

What are principals' levels of compassion and care; openness and communication, adaptiveness; resilience and courage; consultation and collaboration; empowerment and decisiveness during Covid-19?

Analysis – Impact of Covid 19 on School Administrators' Leadership Attributes

The data in table one show that the principal participants exhibited high leadership attributes during the Covid-19 pandemic while implementing virtual learning. For compassion and care the responses were: (M = 3.93; SD =0.47). Also, for: openness and communication the responses were thus: (M = 4.64; SD = 0.49); adaptiveness (M = 4.54; SD = 0.54); resilience and courage (M = 4.51; SD = 0.64); consultation and collaboration (M = 4.44; SD =0.71); empowerment (M = 4.06; SD = 0.84), and decisiveness (M = 4.29; SD = 0.71).

Table 1 shows that the principal participants exhibited high leadership attributes during the Covid-19 pandemic while implementing virtual learning.

Leadership Attributes	Mean	Std. Deviation	Interpretation
Compassion and care	3.93	0.47	High Compassion and care
Openness and communication	4.64	0.49	High Openness and communication
Adaptiveness	4.54	0.54	High Adaptiveness
Resilience and Courage	4.51	0.64	High Resilience and Courage
Consultation and Collaboration	4.41	0.71	High Consultation and Collaboration
Empowerment	4.06	0.84	High Empowerment
Decisiveness	4.29	0.71	High Decisiveness
Valid N (listwise)	-	-	-

Table 1. Desc	iptive Statistics
---------------	-------------------

Research Question 2

Are there significant differences in the scores of the composite dependent variable (compassion and care; openness and communication; adaptiveness; resilience and consultation and collaboration; courage; empowerment and decisiveness) based on region?

 H_01 : There are no statistically significant differences in the scores of the composite dependent variable (compassion and care; openness and communication; adaptiveness; resilience and courage; consultation and collaboration; empowerment and decisiveness) based on region.

Analysis – Principal Leadership Attributes Based on Region

The results from the statistical analysis showed that there are statistically significant

differences in the scores of the composite dependent variable (compassion and care; openness and communication; adaptiveness; resilience and courage; consultation and collaboration; empowerment; decisiveness) based on region. The multivariate main effect of region on the combined dependent attitude variables was statistically significant, F(7, 5) =366.795, p = .000, Pillai's 'trace = .000, partial eta square, $\eta^2_p = .998$. The observed power was 1 (see Table 2).

Table 2 shows there are statistically significant differences in the scores of the composite dependent variable (compassion and care; openness and communication; adaptiveness; resilience and courage; consultation and collaboration; empowerment; decisiveness) based on region. The multivariate main effect of region on the combined dependent attitude variables was statistically significant.

Effect		Value	F	Hypothesis df	esis df Error df Sig.	Sig.	Partial Eta Squared	Partial Eta Squared Noncent. Parameter	Observed Powerd
Intercept	Pillai's Trace	866.	366.795b	7.000	5.000	.000	866.	2567.568	1.000
	Wilks' Lambda	.002	366.795b	7.000	5.000	.000	.998	2567.568	1.000
	Hotelling's Trace	513.514	513.514 366.795b	7.000	5.000	.000	.998	2567.568	1.000
	Roy's Largest Root 513.514 366.795b	513.514	366.795b	7.000	5.000	.000	.998	2567.568	1.000
Region	Pillai's Trace	3.371	1.832	42.000	60.000	.016	.562	76.955	.990
	Wilks' Lambda	.001	2.512	42.000	26.904	.007	.712	66.616	.872
	Hotelling's Trace	28.591	2.269	42.000	20.000	.026	.827	95.304	.938
	Roy's Largest Root 16.529	16.529	23.613c	7.000	10.000	.000	.943	165.291	1.000
a. Design:	a. Design: Intercept + Region								
b. Exact statistic	atistic								
c. The stat	c. The statistic is an upper bound on F that yields a lower bound on the significance level.	on F that yi	elds a lower	bound on the sig	nificance le	vel.			
d. Comput	d. Computed using alpha $= .05$								

ts
S
F
ല
a
ariate
ъ
. <u>2</u> .
H
Iulti
Σ
ાં
a)
Ē
able
ñ

The statistical multivariate main effect created the need for a separate assessment of the univariate effects. However, Levene's test was first done to evaluate the homogeneity of variance of each dependent variable. The results of the Levene's test showed that the equal variance assumption was violated for compassion and care (p = .020); openness and communication (p = .004); adaptiveness (p = .011); resilience and courage (p = .059); consultation and collaboration (p = .021);

empowerment (p = .011); decisiveness (p = .037), as shown in Table 3).

Table 3 shows the results of the Levene's test showed that the equal variance assumption was violated for compassion and care (p = .020); openness and communication (p = .004); adaptiveness (p = .011); resilience and courage (p = .059); consultation and collaboration (p = .021); empowerment (p = .011); decisiveness (p = .037).

Table 3. Levene	e's Test of l	Equality of Error	Variancesa
-----------------	---------------	-------------------	------------

	F	df1	df2	Sig.
Compassion and care	4.161	6	11	.020
Openness and communication	6.576	6	11	.004
Adaptiveness	4.990	6	11	.011
Resilience and Courage	2.918	6	11	.059
Consultation and Collaboration	4.112	6	11	.021
Empowerment	5.000	6	11	.011
Decisiveness	3.411	6	11	.037
Tests the null hypothesis that the error variance of the	dependent	variable i	s equal acros	ss groups
a. Design: Intercept + Region				

The univariate main effects were evaluated via the output from the Tests of Between-Subjects Effects analysis (see appendix A). When multiple univariate tests are conducted, Bonferroni adjustment of the significance level is applied to reduce the likelihood of Type 1 error.

Hence the significance level of 0.0125 was applied to leadership attributes as influenced by Covid-19. Since the assumption of homogeneity of variance assumption was violated in the case-dependent variables, an even stricter significance level of .001 was adopted.

Significant values of age group were found only on the dependent variables of compassion and care; openness and communication; adaptiveness; resilience and courage, with significant values of (p = .010; < 0.0125), (p =.015; < 0.0125); (p = .011; < 0.0125) and (p =.010; < 0.0125), respectively.

Results

The null hypothesis 1 was rejected as the statistical analysis showed that there was a difference in the scores of the composite dependent variable (compassion and care; openness and communication; adaptiveness; resilience and courage; consultation and collaboration; empowerment; decisiveness) among regions of principals at the primary institutions in Jamaica. The univariate result showed significant values of the region only on the dependent variables of challenges of compassion and care; openness and communication; adaptiveness; resilience and courage.

Research Question 3

Are there significant differences in the scores of the composite dependent variable (compassion and care; openness and communication; adaptiveness; resilience and courage; consultation and collaboration; empowerment and decisiveness) based on the school level?

 H_02 : There is no statistically significant differences in the scores of the composite dependent variable (compassion and care; openness and communication; adaptiveness; resilience and courage; consultation and collaboration; empowerment and decisiveness) based on the school level.

Analysis – Principal Leadership Attributes Based on School Level

The results from the statistical analysis showed that there are no statistically significant differences in the scores of the composite dependent variable (compassion and care; openness and communication; adaptiveness; resilience and courage; consultation and collaboration; empowerment; decisiveness) based on the school level. The multivariate main effect of school level on the combined dependent attitude variables was not statistically significant, F(7, 9) = .688, p =.760, Pillai's 'trace = .000, partial eta square, η^2_p = .325. The observed power was .276 (see Table 4).

Table 4 shows that there are no statistically significant differences in the scores of the composite dependent variable (compassion and care; openness and communication; adaptiveness; resilience and courage; consultation and collaboration; empowerment; decisiveness) based on the school level.

Results

The researcher failed to reject the null hypothesis 2 as the statistical analysis showed that there is no difference in the scores of the composite dependent variable (compassion and care; openness and communication; adaptiveness; resilience and courage; consultation and collaboration; empowerment; decisiveness) based on school levels of principals at the primary and secondary institutions in Jamaica. Thus, there was no need for a separate assessment of the univariate effects.

Research Question 4

Is there significant differences in the scores composite dependent of the variable (compassion and care; openness and communication; adaptiveness; resilience and consultation collaboration; courage; and empowerment and decisiveness) based on gender?

 H_0 3: There are no statistically significant differences in the scores of the composite dependent variable (compassion and care; openness and communication; adaptiveness; resilience and courage; consultation and collaboration; empowerment and decisiveness) based on gender.

Analysis – Principals' Leadership Attributes Based on Gender

The results from the statistical analysis showed that there is no statistically significant differences in the scores of the composite dependent variable (compassion and care; openness and communication; adaptiveness; resilience and courage; consultation and collaboration; empowerment; decisiveness) based on gender. The multivariate main effect of gender on the combined dependent attitude variables was not statistically significant, *F* (7, 1.034^{b}) = .420, *p* = .465, partial eta square, η_{p}^{2} = .420. The observed power was .255 (See Table 5).

Table 5 shows that there are no statistically significant differences in the scores of the composite dependent variable (compassion and care; openness and communication; adaptiveness; resilience and courage; consultation and collaboration; empowerment; decisiveness) based on gender.

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Powerd
Intercept	Pillai's Trace	.992	166.640b	7.000	9.000	.000	.992	1166.480	1.000
I	Wilks' Lambda	.008	166.640b	7.000	9.000	.000	.992	1166.480	1.000
	Hotelling's Trace	129.609	166.640b	7.000	000.6	000.	.992	1166.480	1.000
	Roy's Largest Root	129.609	166.640b	7.000	000.6	000.	.992	1166.480	1.000
Schoolelevel	Pillai's Trace	.650	.688	14.000	20.000	.760	.325	9.638	.276
	Wilks' Lambda	.448	.634b	14.000	18.000	.804	.330	8.879	.244
	Hotelling's Trace	1.010	.577	14.000	16.000	.846	.335	8.076	.212
	Roy's Largest Root	.690	.986c	7.000	10.000	.491	.408	6.902	.244
a. Design: Into	a. Design: Intercept + Schoolelevel								
b. Exact statistic	tic								
c. The statistic	c. The statistic is an upper bound on F that yields a lower bound on the significance level	F that yields	a lower bou	and on the signific	cance level.				
d. Computed 1	d. Computed using alpha = $.05$								
				Table	Table 5. Multivariate Tests	te Tests			
Effect		Value	F	Hypothesis df	If Error df	f Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^c
Intercept	Pillai's Trace	.994	239.540^{b}	7.000	10.000	000.	.994	1676.782	1.000
	Wilks' Lambda	.006	239.540 ^b	7.000	10.000	000.	.994	1676.782	1.000

es
Чe
ariate
vari
Multiv
Ξ
Σ
4
e
q
[a]

Effect		Value	F	Hypothesis df Error df	Error df	Sig.	Partial Eta Squared	Partial Eta Squared Noncent. Parameter	Observed Power ^c
Intercept	Pillai's Trace	.994	239.540^{b}	7.000	10.000	.000	.994	1676.782	1.000
	Wilks' Lambda	.006	239.540^{b}	7.000	10.000	000.	.994	1676.782	1.000
	Hotelling's Trace	167.678	239.540^{b}	7.000	10.000	000.	.994	1676.782	1.000
	Roy's Largest Root	167.678	239.540^{b}	7.000	10.000	000.	.994	1676.782	1.000
Gender	Pillai's Trace	.420	1.034^{b}	7.000	10.000	.465	.420	7.239	.255
	Wilks' Lambda	.580	1.034^{b}	7.000	10.000	.465	.420	7.239	.255
	Hotelling's Trace	.724	1.034^{b}	7.000	10.000	.465	.420	7.239	.255
	Roy's Largest Root	.724	1.034^{b}	7.000	10.000	.465	.420	7.239	.255
a. Design:	a. Design: Intercept + Gender								
b. Exact statistic	atistic								
c. Comput	c. Computed using alpha $= .05$								

Results

The researcher failed to reject the null hypothesis2 as the statistical analysis showed that there is no difference in the scores of the composite dependent variable (compassion and openness communication; care; and courage; adaptiveness; resilience and consultation and collaboration; empowerment; decisiveness) based on the gender of principals at the primary and secondary institutions in Jamaica. Thus, there was no need for a separate assessment of the univariate effects.

Discussion

It was found that the principal participants showed high leadership attributes during the Covid-19 pandemic while implementing virtual learning. It showed that for compassion and care the responses were (M = 3.93; SD = 0.47). Compassion and care are said to provide a sense of togetherness during the Covid-19 crisis. It has been posited that leaders' ability to cultivate and spread a sense of togetherness among workers is essential during the Covid-19 pandemic [14]. That is, leaders should place emphasis on forging a connection instead of correction [15]. Leaders must take time to listen to employee concerns, and demonstrate geniuses of care about employee's well-being mentally, emotionally, and physically through connective decisions [15, 16]. The act of empathy and moving compassionately in the skin of employees is vital during Covid-19 as the tragedy was common during this pandemic [17-18]. When leaders practice these attributes, their policy implementation and decisions are made from an advocacy standpoint [14].

Also, it was found that for openness and communication, the responses were (M = 4.64; SD = 0.49). Communication has been found to be an essential leadership principle when experiencing a crisis as it assists in inspiring a shared vision in the organization [15, 19]. It has been shared those regular communication by updating of employees in a crisis is pivotal to

crisis management and a key responsibility of the leader [16]. It helps the leader in making employees feel comfortable in an uncomfortable situation. Through multiple channels, the situational context should be permeated with honesty and transparency, factuality, frequency, iterativeness, clarity and directness [16, 19]. Additionally, adaptiveness attracted responses thus: (M = 4.54; SD = 0.54). Operating in the Covid-19 adventure demanded adaptive leadership due to a sense of uncertainty and turbulence it entails. Therefore, leaders must be agile, continually learning and tweaking their responses according to the context, conditions, and situation [16, 20]. This adaptive mindset is required for effective decision-making and critical thinking, inquiring into new processes, restructuring strategies of action, and understanding the situation at hand [16]. This mindset is required to adopt new paradigms in novel situations.

Additionally, resilience and courage were found to be highly practiced by leaders (M =4.51; SD = 0.64). When a leader exhibits resilience, obstacles and temporary setbacks used to forge new pathways [21]. Under duress, resilient leaders utilize courage, and make hard decisions and sacrifices which are needed to protect strategic pathways during a novel crisis [15].

The results also that leaders score high in consultation and collaboration (M = 4.44; SD = 0.71). In a novel, crisis leaders must seek the contributions of others in decision-making [22], which a complex situation such as the Coronavirus pandemic in inclusive decision-making and stakeholder collaboration to achieve strategic goals [16, 23]. Therefore, leaders must be equipped to share knowledge and expertise [24] gathered from internal and external expert colleagues to make informed decisions [15].

Another attribute that the leaders scored high in was empowerment (M = 4.06; SD = 0.84). This signifies that leaders stimulate the selfmotivation of subordinates by motivating them to go beyond the call of duty to perform and contribute to the goals of the organization [25]. To cultivate a sense of empowerment, leaders must add value and seriousness to the contribution made by employees to the decision-making process [26] and facilitate employees' creative ideas as contributors through open discussions [26].

At the same time, decisiveness scores high as a leadership attribute exercised by the administrators (M = 4.29; SD = 0.71). In any crisis situation, timing is critical for swift response in leadership. Also, directness, strength, and the ability adopt a lead-role approach is important [18]. A quick response has been a recognized characteristic of decisive educational leadership during the Covid-19 pandemic. Since decisive leadership does not allow time to source employees' input of ideas, the leader must formulate and communicate well-defined expectations and influence others to assist in achieving the established priorities with feeling left out of the decision-making process. Therefore, the decisive leader must be prepared to take rapid, high-impact, hard decisions in scarce information settings based on experience, intuition, consensus, and common sense [15].

The results further showed that there was a difference in the scores of the composite dependent variable (compassion and care; openness and communication; adaptiveness; resilience and courage; consultation and collaboration; empowerment; decisiveness) among regions of principals at the primary institutions in Jamaica. The univariate result showed significant values of the region on the dependent variable of compassion and care; openness and communication; adaptiveness; resilience and courage. Similarly, it was suggested that principals who are aware of local socioeconomic levels act in advance of government assistance, such as its systems of providing vouchers [27]. Thus, for those students who were in need of meals instead of vouchers to, all students who would normally receive lunch through the PATH programme, not just those previously benefited.

The results showed that there is no difference in the scores of the composite dependent variable (compassion and care; openness and communication; adaptiveness; courage; consultation resilience and and collaboration; empowerment; decisiveness) based on school levels of principals at the primary and secondary institutions in Jamaica. Contrary to these results, many authors believe that from the onset of the Covid-19 crisis, the type of organization or situational context of the school became of significance, with schools making decisions on their approaches based on their local community's needs [27].

The results of this study showed that there is no difference in the scores of the composite dependent variable (compassion and care; openness and communication; adaptiveness; resilience and courage; consultation and collaboration; empowerment; decisiveness) based on the gender of principals at the primary secondary institutions in and Jamaica. However, unlike this study, another study conducted found that female leaders received higher trust to lead organizations in times of crisis when the female leader displays high levels of relational behaviors and when uncertainty about the crisis's consequences is minimal [28].

Relational qualities always help restore trust in a company. The author further suggested that female leaders' relational qualities can aid in the rebuilding of trust in an organization more than male leaders' relational qualities during uncertain times. However, only if the crisis is considered to be predictable, controllable, and with low levels of uncertainty. Findings from research on gender stereotypes reported that in times of crisis, stereotypically "female" traits are given more importance for a leader to possess and that stereotypically "male" traits are less desirable [29].

Conclusion

Overall, the findings of this analysis of the impact of Covid-19 on school leaders' leadership show that the leaders exhibit the attributes at high levels from policy and situational levels; from making abrupt decisions to collaboration and care during the sudden changes in curriculum development and implementation. School leaders were operating under immense pressure during this crisis management process [33] in an environment which as unconducive to effectively exhibit personal leadership resources in carrying policy directives and satisfy students and staff needs through communication, consultation and measured deliberative decision-making. The results showed that the principal participants scored high on the leadership attributes of compassion and care. openness and communication; adaptiveness; resilience and consultation courage; and collaboration; empowerment; decisiveness during the Covid-19 pandemic. These findings hold critical and practical lessons for handling the future crisis. It showed that there are effective leaders in the education system that can function in a crisis once the government provides adequate guidance and regulations with a relevant resource. An important lesson from the findings of this study is that a well-coordinated system of consulting with school leaders on urgent matters of leadership with timely information can ensure that the effects of any future crisis will be minimal. This would afford school leaders to make informed decisions in the nest interest of their schools and students, based on current.

Conflict of Interest

The researcher is a vice principal who has been trained in crisis management.

Acknowledgments

This article would not be a success without the help of the following persons and organizations:

Cadabbra Brown-Bernard- School Psychologist, USA for her intellectual guidance in developing this topic as it relates to my areas of interest in research.

Special thanks to Sreejith Bakasubramanian, lead author, Confirmation of a crisis leadership model and its effectiveness: lessons from the Covid-19 Pandemic for granting me permission to adapt and adopt his instrument to fit the Jamaican context for utilization in collecting data for this article.

Principals and Vice Principals whom I reached out to for help personally in completing the instrument for use of data collection for this article.

Research Guide, Professor Disraeli Hutton for his guidance.

Statistician, Dr. Devon Crossfield for his help in analysing the data.

References

[1] OECD. (2020). A framework to guide an education response to the Covid-19 Pandemic of 2020. Date of Access: 10/09/2022. https://read.oecd-ilibrary.org/view/?ref=126_126988-

t631xosohs&title=A-framework-to-guide-an-

education-response-to-the-Covid-19-Pandemic-of-2020.

[2] Alqabbani, S., Almuwais, A.,and Almoayad, F (2020). Readiness towards emergency shifting to remote learning during Covid-19 pandemic among university instructors. E Learning and Digital Media. Online First 18 (5): 1-20.

[3] Anderson, S. (2020). No time to say goodbye How Coronavirus is changing learning. https://patch.com/wisconsin/mountpleasant/no-timesay-goodbye-how-coronavirus-changing-

learning?utm_source=facebook.com&utm_medium =social&utm_term=kids+%26+family+&utm_camp aign=autopost&utm_content=mountpleasantsturtevant&fbclid=IwAR1dCunSNxj06KETOvh7hV tjxaxQaCfw5sF5X3IZJ05mM14GHqe9-6cPPQM. [4] Mladenova, T., Kalmukov, Y., and Valova, I. (2020). Covid 19 – A major cause of digital transformation in education or just an evaluation test. *TEM Journal*, 9(3), 1163–1170.

[5] Ainsworth, P. (2010). Developing a selfevaluating school: A practical guide. (NY: Continuum International Publishing Group).

[6] Barrow K., Boyle H., Ginsburg M., Leu E., Pier
D., Price-Rom A. & Rocha V. (2006) Cross-National Synthesis on Education Quality Report No
2: Professional Development and Teachers' Conceptions of Educational Quality. US Agency for International Development, Washington DC.

[7] Murphy, M. J., Levant, R. F., Hall, J. E., & Glueckauf, R. L. (2007). Distance education in Professional training in psychology. Professional Psychology: Research and Practice, 38(1), 97-103.

[8] Crossfield, D. (2018) Improving the Academic Performance of Boys in Jamaica: An Intervention Model. In C. Beckford the contemporary Caribbean: Issues, Challenges, and opportunities. Central America and the Caribbean, ISBN 978-1-53614-088-0.

[9] Crossfield, D. & Bourne, P. A. (2018). An Inquiry into Teachers Perception of at-Risk Students in Jamaica: A Phenomenological Approach. *International Journal of Emergency Mental Health and Human Resilience*, Vol.20, No. 2, pp 1-10© 2018 OMICS International ISSN 1522-4821. Retrieved May 2020 from: https://www.researchgate.net/publication/326249045

[10] Slater, G. B. (2015). Education as Recovery: Neoliberalism, School Reform, and the Politics of Crisis. *Journal of Education Policy* 30 (1): 1–20.

[11] Arnold, B., Rahimi, M. & Riley, P. (2021). "Working through the First Year of the Pandemic: A Snapshot of Australian School Leaders' Work Roles and Responsibilities and Health and Wellbeing during Covid-19." *Journal of Educational Administration and History* 53 (3–4):301–309. doi: https://doi.org/10.1080/00220620.2021.1975367.

[12] Thomson, P., Greany, T. & Martindale, N. (2021). "The Trust Deficit in England: Emerging Research Evidence about School Leaders and the Pandemic." *Journal of Educational Administration*

and History 53 (3–4): 296–300. doi: https://doi.org/10.1080/00220620.2021.1975366.

[13] Reid, D. B. (2022). "Suppressing and Sharing:How School Principals Manage Stress and AnxietyduringCovid-19."SchoolLeadership&Management42(1):62–78.https://doi.org/10.1080/13632434.2021.1974827.

[14] Haslam, S. A., Steffens, N. K., Reicher, S. D.,
& Bentley, S. V. (2021). Identity leadership in a crisis: A 5R framework for learning from responses to Covid-19. *Social Issues and Policy Review*, 15(1), 35–83. https://doi.org/10.1111/sipr.12075.

[15] Kaul, V., Shah, V. H., & El-Serag, H. (2020).
Leadership during crisis: Lessons and Applications from the Covid-19 pandemic. Gastroenterology, 159(3), 809–812.

https://doi.org/10.1053/j.gastro.2020.04.076.

[16] Dirani, K. M., Abadi, M., Alizadeh, A., Barhate, B.,Garza, R. C., Gunasekara, N., Ibrahim, G., & Majzun, Z. (2020). Leadership competencies and the essential role of human resource development in times of crisis: A response to Covid-19 pandemic. Human Resource Development International, 23(4), 380–394. https://doi.org/10.1080/13678868.2020.1780078.

[17] Deloitte (2020a). The heart of resilient leadership: Responding to Covid-19: A guide for senior executives. https://www2.deloitte.com/us/en/insights/economy/c ovid-19/heart-of-resilient-leadership-responding-tocovid-19.html.

[18] Forster, B. B., Patlas, M. N., & Lexa, F. J.
(2020). Crisis Leadership During and Following Covid-19. Canadian Association of Radiologists' Journal, 71(4), 421–422. https://doi.org/10.1177/0846537120926752.

[19] Stoller, J. K. (2020). Reflections on leadership in the time of Covid-19. BMJ Leader, 4(1), 1–3. https://doi.org/10.1136/leader-2020-000244.

[20] Ramalingam, B., Nabarro, D., Oqubay, A., Carnall, D. A., & Wild, L. (2020). 5 principles to guide adaptive leadership. Harvard Business Review. https://hbr.org/2020/09/5-principles-toguide-adaptive-leadership.

[21]Folkman, J. (2017). New Research: 7 Ways to Become a More Resilient Leader, Date of Access:

12/09/2022.

https://www.forbes.com/sites/joefolkman/2017/04/0 6/new-research-7-ways-to-become-a-more-resilientleader/?sh=50292c157a0c.

[22] UN Global Compact (2020). Covid-19: What makes a good leader during a crisis. https://unglobalcompact.org/take-action/20th-anniversary-campaign/covid-19-what-makes-a-

good-leader-during-a-crisis.

[23] Sadiq, A. A., Kapucu, N., & Hu, Q. (2021). Crisis leadership during Covid-19: The role of governors in the United States. International Journal of Public Leadership, 17 (1), 65–80. https://doi.org/10.1108/IJPL-08-2020-0071.

[24] Lagowska, U., Sobral, F., & Furtado, L. M. G. P. (2020). Leadership under crises: A research agenda for the post-Covid-19 Era. BAR – *Brazilian Administration Review*, 17(2), 1–5.

[25] Coleman, H. J. (1996). Why employee empowerment is not just a fad. *Leadership and Organization Development Journal*, 17(4), 29–36. https://doi.org/10.1108/01437739610120574.

[26] Quinn, R. E., & Spreitzer, G. M. (1997). The road to empowerment: Seven questions every leader should consider. Organizational Dynamics, 26(2), 37–49. https://doi.org/10.1016/S0090-2616(97)90004-8.

[27] Bradbury, A., Braun, A., Sam Duncan, S., Harmey, S., Levy, R. & Moss, G. (2022). Crisis policy enactment: primary school leaders' responses to the Covid-19 pandemic in England. Retrieved September 2022 from: https://www.tandfonline.com/doi/full/10.1080/0268 0939.2022.2097316. [28] Harvard Kennedy School (2022). A Female Leadership Trust Advantage in Times of Crisis: Under What Conditions? Retrieved September 2022 from: https://gap.hks.harvard.edu/female-leadershiptrust-advantage-times-crisis-under-what-conditions.

[29] Oakes, K. (2022). The invisible danger of the 'glass cliff'. Retrieved September 2022 from: https://www.bbc.com/future/article/20220204-the-danger-of-the-glass-cliff-for-women-and-people-of-colour.

[30] Cresswell, J. (2013). Steps in conducting a scholarly mixed methods study. Presentation, University of Nebraska, London. https://digitalcommons.unl.edu/cgi/viewcontent.cgi? article=1047&context=dberspeakers.

[31]Bradt, J., Burns, D., and Creswell, J. (2013) Mixed methods research in music therapy research. *Journal of Music Therapy*, 50(2), 123-148.

[32] Babbie, E. R. (2010). The Practice of Social Research Quantitative Research in Education with SPSS. *SAGE Publications*, 12, 1-4.

[33] Fotheringham, P., Harriott, T., Healy, G., Arenge, G. & Wilson, E. (2021), Pressures and influences on school leaders navigating policy development during the Covid-19 pandemic. *British Educational Research Journal*. https://doi-org.am.e-nformation.ro/10.1002/berj.3760.