

INFLUENCE OF DISTRIBUTED LEADERSHIP ON SCHOOL EFFECTIVENESS

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Abstract

The present study examines the relationship between distributed leadership (DL) and school effectiveness (SE), It examines which sub-scale of distributed leadership best explains school effectiveness. Questionnaires were used to get the needed data from secondary school teachers in Katsina state Nigeria. The questionnaires were adopted from Devis (2009) and Hulpia et al. (2010) and Oregon County Public Schools (OCPS), for distributed leadership inventory and school effectiveness scale respectively. Data was obtained from teachers of 227 sample schools. In all, 499 secondary school teachers sample was used in this study. Findings indicated that all the five subscales of distributed leadership predict school effectiveness. The predictors explained 48.4% variance of distributed leadership. Besides, it was revealed that principal leadership and participative decision making subscales, best predict school effectiveness.

Key words: Distributed leadership, School effectiveness, Correlation, Multiple regressions.

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Introduction

Leadership can be viewed as the process of identifying, acquiring, allocating and utilizing material and human resources in order to make condition necessary for innovation and changes in effective teaching and learning (Spillane 2005). According to Ross, et al. (2005), in the past leadership theory and studies have focused more on the characteristics, behaviors and outcomes of the work of a single leader. In other words the task of moving the organization forward rested squarely on the shoulders of single person, i.e. the person occupying leadership position.

But of recent, there has been a challenge to the dominance of individualized view of leadership (Ross, et. al., 2005). The challenge for a single leader running an organization is more pronounced in educational setting compared to other organizations, because of the rise in demand for education, government policies among other reasons

Moreover, it should be stressed that the practice of heroic leadership cannot be sustained in today's world, due to many reasons, such as transfer, turn over, retirement on the part of both the leaders and followers among others. Harris (2008a), states that the need for change in school and school systems cannot be overemphasized, as there are several world, national and local trends that will make significant changes in school and schooling inevitable. For instance, globalization, employment issues and departure from the ways of engaging school leaders are some of the factors that will make changes necessary.

The above scenario pave the way for the emergence of new leadership concepts and practice that will take care or at least minimize some of the challenges organizations especially educational organizations are facing. There is consensus that the old organizational structures of schooling simply do not fit the requirement of leading in the twenty-first century (Harris 2005). Additionally, the problems our schools are facing today will obviously require more distributed form of leadership, as long as we want effective teaching and learning to be realized and sustained in those schools (Harris 2008b).

This study is aimed at investigating whether the five constructs of distributed leadership predict school effectiveness. In addition the study want to investigate which among the five constructs predicts DL best, within the Nigerian context. To realize the above objectives, two research questions were formulated. The questions are:

1. *Do the five constructs of distributed leadership predict school effectiveness? And how much variance in school effectiveness does the five subscales explained?*
2. *Which among the five subscales of distributed leadership best predict school effectiveness?*

Theoretical Framework

Distributed leadership

Today's schools require a shift from the way they are being governed if effective teaching and learning are to take place. As noted earlier, the schools are facing serious challenges, like; teacher burnout, teacher attrition, over crowded classrooms to mention just few. To tackle some of the problems mentioned, the schools need to be reformed. However, as a result of complexity of the challenges schools are facing, there are doubts if single heroic leader, can single handedly spearhead the reforms.

The solution to the above problem is dispersed leadership. This type of leadership is not new (Gronn, n.d), and though it is the present idea (Harris, 2008a), cannot be said to be a new leadership technique but rather an intellectual level that emphasizes the fact that leadership needs an effort and inputs of most members of the organization (Oduro, 2004). As Gronn (2008) notes there were limits to the ability of principal to tackle the challenges associated with implementing the needed reform.

According to Spillane (2006) it is not possible for one person to single-handedly lead reform efforts to improve teaching and learning in a complex organization as a school. Furthermore, Harris (2008a) opines that school heads and or principals can no longer be able to handle critical areas requiring leadership in schools. As a result different leadership structures and practice are past emerging. In addition, Harris (2005) argued that if distributed leadership is in place, more of the knowledge, skills and talent of staff will be identified, developed and put to use than under a more traditional hierarchical pattern of leadership.

Moreover, it has been claimed that student's outcomes are more likely to improve where leadership sources are shared or distributed throughout the school and where teachers are empowered in decisions related to teaching, learning and assessment (Silins & Mulford, 2002). Lashway (2006) claimed that, if distributed leadership is a threat to the established way of doing things, but it provides respite to the over-crowded job of the principal. At a time when principal is over stretched, the idea of sharing the challenges across organizational members is tempting.

Distributed leadership is a form of lateral leadership where the practice of leadership is stretched within organizational members. In distributed leadership, organizational influence and decision-making is the responsibility of all members of the organization rather than one individual direction (Harris, 2008b). Furthermore, Spillane (2006) notes that in distributed leadership, leadership is no more viewed as the responsibility of school principal and other formal and informal leaders but the connection and interaction of leaders, followers and their situations that results to leadership practice.

It is worth noting that distributed leadership goes beyond heroic leader, i.e. single charismatic or transformational leader. Angelle (2010) argues that distributed leadership is beyond the single talented and influential leader who changes an organization. It is the stage where by leadership is shared by the most organizational members for the betterment of the organization. Distributed leadership can also be viewed as activities carried out by most members in the organization. Ross, et al. (2005), looks at distributed leadership as a collective effort of all members of the organization. In other words it is the responsibility of all members of the organization, not restricted to certain individuals who are occupying the leadership positions.

According to spillane (2006), distributed leadership perspective provides another way of viewing leadership in our schools, by stressing the aspect of leadership practice and by assuming that leadership practice is the product of interaction between leaders, followers, and their situations. In other words, distributed leadership provides a platform and a background for looking at leadership in another way.

Distributed leadership, which is sometime described as post- heroic leadership model is a leadership model that empowers the staff as a result of their involvement in almost all what the organization does. Hulpia and Devos (2010), argues that distributed leadership is also seen as post heroic leadership model, in this model, leadership is viewed as a team level activities where leadership is distributed among the school team. Moreover, Oduro (2004), states that post-heroic leadership encourages teamwork, participation, empowerment, risk-taking and de-emphasizes control over others.

It should be stressed that educators, researchers as well as policy makers described post-heroic leadership in different terms; such as dispersed, collaborative, shared, to mention just few. However, in some cases, these terms are used alternately with distributed leadership to mean the same thing (Oduro, 2004) but, in some cases, they slightly differ. According to Harris (2008b)

different related terms of distributed leadership means that leadership is more often than not used as a short form to explain any form of stretched, collaborative or dispersed leadership practice in schools.

Relationship between distributed leadership and school effectiveness

School effectiveness can be viewed as the academic standing of the school which can be explained in terms of output of the school. The output is usually assessed in terms of average academic achievements of the students in that school at the end of certain period of their formal schooling (Scheerens 2000). In other words, before a school can be term effective, academic standing of its students must be looked into at a certain period of their academic pursuits.

In educational setting, school effectiveness research started of in the early 1970's as a way of checking the impact of schools and education on students' educational performance (Mujis, 2006). There are a number of factors that influences organizational effectiveness, but the most influential and critical is leadership. As Huber and Mujis (2010) note leadership has since been recognized as a critical factor in organizational effectiveness. Moreover, Leithwood et al. (2004) explain that effective educational leadership makes a difference in improving students' learning. Leithwood et al., further argued that there is nothing new or controversial about that idea.

However, because of the challenges our schools are facing, there is doubt on the ability of a single leader to successfully run school toward realization of it's objective of effective teaching and learning. According to Lashway (2003), changes being witnessed in schools has compounded the work of the principal such that the old idea that principal alone can effectively run school single handedly is no longer tenable. In other words, today's educational challenges cannot be effectively tackled by the principals. They need to share, stretch and disperse leadership in order to move their respective schools forward.

Additionally Pont et al. (2008) opines that distributing leadership across different people within the organization and organizational structure can tremendously help in tackling most challenges our schools are facing and more importantly improve school effectiveness. Furthermore, Harris (2008) argues that distributed leadership has been found to be a factor that enhances school effectiveness and school improvement. Moreover Angelle (2010) found that in a school where distributed leadership is practiced, teachers exhibit some features that aid

students' achievement. These features are; teachers efficacy, trust, job satisfaction and intention to stay.

Method

Research instruments

In this study Davis (2009) and Hulpia et al (2010) distributed leadership inventory and Oregon County Public Schools (OCPS), school effectiveness scale were used to get the needed data from teachers in the sample secondary schools in Katsina state, Nigeria. The questionnaires were rated using seven point Likert scale. The rating is 1 = strongly disagree (SD), 2 = moderately disagree (MD), 3 = slightly disagree (SD), 4 = neither agree nor disagree (N), 5 = slightly agree (SA), 6 = moderately agree (MA) and 7 = strongly agree (SA). Besides, the distributed leadership inventory consist of five dimensions. Two of the dimensions; artefacts and teacher leadership were adopted from Devis (2009), while the remaining three; cooperation of leadership team, participative decision making and principal leadership were adopted from Hulpia et al. (2010). Furthermore, the school effectiveness scale was adopted from OCPS. The scale contains seven dimensions. These dimensions are; safe and orderly environment, climate of high expectation for success, instructional leadership, opportunity to learn and students' time to task, clear and focused mission, frequent monitoring of students' progress and home-school-relation.

Sample

The distributed leadership inventory and school effectiveness scale questionnaires were administered to seven hundred and fifty teachers of both junior and senior secondary schools in Katsina state Nigeria. Five hundred and fifty or 73% of the questionnaires were returned, out of which thirty six or 6.5% of the questionnaires contained serious missing information. These questionnaires with missing values were excluded from the data set for this study. The decision to exclude them from the study was because it has been argued that if quite a number of questions were left unanswered, it is better not to include them in the data set for analysis (Creswell 2010, Sekeran & Bougie 2010). Furthermore, out of the five hundred and fourteen retained, fifteen were identified as multivariate outliers and removed from the data set.

Table. 1

Respondents Background Characteristics

SN	Characteristics	Frequency	Percentage
1	Gender		
	Male	336	67.3%
	Female	163	32.7%
	Total	499	100%
2	Age		
	20-30	189	37.9%
	31-40	155	31.9%
	41+	155	31.9%
	Total	499	100%
3	Working Experience		
	1-5	193	38.7%
	6-10	161	32.3%
	11+	145	29.1%
	Total	499	100%

Table. 1 above shows the respondents background characteristics. In all 499 respondents were used in this study. Three hundred and thirty six (336) or 67.3% of the respondents were male while one hundred and sixty three (163) or 32.7% of the respondents were female. The age of the respondents ranged from 20 to 62 years with an average of 35 years. Moreover, one hundred and ninety three or 38.7% have 1-5 years working experience; one hundred and sixty one equivalents to 32.3% have 6-10 years working experience while one hundred and forty five or 29.1% have more than eleven years working experience. The working experience of the respondents ranged from 1- 35 years with an average of 9 years.

Result

Table 2 below shows the mean, standard deviation and correlations of the independent variables (subscales of distributed leadership) and dependant variable (school effectiveness). An examination of the means of the independent variables indicated that artifacts (ART) received

the highest score (M = 5.9), followed by; participative decision making (PDCM) (M = 5.4), teacher leadership (TC. L) (M = 5.4). The subscale with the lowest mean was principal leadership (PRIN.L) (M = 5.2). Additionally the Pearson correlation matrix revealed that all the independent variables were statistically and positively correlated with dependant variable SE. The correlations range from 0.242- 0.532.

Table 2
Descriptive Statistics and Correlations

Variable	Mean	S.D	2	3	4	5	6
1.COLT	5.24	.967	.464	.502	.532	.521	.437
2.PCDM	5.43	1.72		.428	.462	.424	.242
3.PRIN L	5.22	1.73			.404	.421	.257
4.ART	5.87	1.44				.479	.304
5. TC. L	5.40	1.65					.356
6.TotalSE	5.16	1.55					

Variables 1-5 subscales of distributed leadership

All correlations are statistically significant $p < 0.001$

Multiple regression analysis was conducted for identify whether the five subscales of distributed leadership predicts school effectiveness and which among the five subscales best predicts school effectiveness. Table 3 below shows the result of the multiple regression analysis. It should be stressed that in the regression all the five subscales of DL were used. The analysis indicated that all the five subscales of DL, cooperation of leadership team, participative decision making, principal leadership, artifacts and teacher leadership were statistically significant predictors of school effectiveness. The subscales explained 48.4% of the variance of school effectiveness ($F(5, 493) = 92.38, p = .001$).

Furthermore, examination of the table indicated that among the five subscales of distributed leadership, principal leadership (PRIN.L) (standardized coefficient .23), makes the strongest unique contribution in explaining the school effectiveness, when the variance explained

by all other variables is controlled. The next subscale that contributes most is participative decision making (PDCM) (standardized coefficient .22) and the last is cooperation of leadership team (COLT) (standardized coefficient .13).

Table 3
Regression coefficients and F-test value for school effectiveness

Variable	B	SE	β	Sig.	F	R ²
Constant	2.026	.156		.000	92.38 (5.493)	0.484
COLT	.076	.022	.134	.001		
PDCM	.123	.021	.220	.000		
PRIN.L	.152	.027	.227	.000		
ART	.109	.023	.187	.000		
TC.L	.132	.022	.217	.000		

Discussion and conclusion

The findings of this study with regards to the mean of the five subscales of distributed leadership indicated that; artifacts recorded the highest mean (M = 5.87, SD = 1.44), followed by Participative decision making (M = 5.43, SD = 1.72), TC.L (M = 5.40, SD = 1.65), COLT (M = 5.24, SD = .967) and PRIN.L (M = 5.22, SD = 1.73). These findings implies that teachers more often than not uses available tools like examination results among others to improve teaching and learning (artifact), participate fully in decision making (participative decision making), feel that they play an important role in moving the school forward (teacher leadership) cooperate with one another to move the school forward (cooperation of leadership team). However, the dimension that recorded lowest mean is principal leadership. That notwithstanding, the findings of the study also revealed that the independent variables (subscales of DL) positively and statistically predicted the dependant variable school effectiveness. The subscales explained 48.4% variance school effectiveness (F. (5,493) = 92.38, p = .0001. The present study also

found that among the five subscales of distributed leadership, principal leadership and participative decision making are the strongest predictors of school effectiveness standardized coefficient .23 and .22 respectively. But, cooperation of leadership team appears to be the weakest predictor of school effectiveness, standardized coefficient .13.

. The findings supports Pont et al (2008) who argues that if leadership is distributed across people and structure, it will help minimize school challenges and improve school effectiveness. The findings equally supports similar findings (Angelle 2010, Leithwood et al. 2004, Mujis 2006, Spillane,2006).

The study has practical implication, in that it brought to the fore the need for our educational administrators at the ministry, zonal offices and school level to appreciate the importance of distributing leadership in our schools and consequently devise means of encouraging the principals at school levels to do so. This will go along way in enhancing effective teaching and learning in our secondary schools and ultimately make them effective. Moreover, the study being one of the few conducted in Nigeria in general and Katsina state in particular, has contributed theoretically to the literature, regarding the influence of distributed leadership on school effectiveness within Nigerian context.

However, the study has some limitations. First, the study was conducted in secondary schools; as such there is need for research to be conducted in primary and possibly in tertiary institutions, so as to determine whether same result may be obtained. Similarly, the present study excluded teachers from private secondary schools; therefore, more research is needed to incorporate all teachers of secondary schools in the state.

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