

Mediating Effect of Teacher Empowerment Between Entrepreneurial Leadership and School Effectiveness

Abbas Sani Dahiru, Zaidatul Akmaliah Lope Pihie, Ramli Basri and Siti Aishah Hassan
Faculty of Educational Studies, University Putra Malaysia, 43400 Serdang, Selangor, Malaysia

Abstract: This study intends to investigate the mediating effect of teacher empowerment between entrepreneurial leadership and school effectiveness. The research adopted a correlational design with a total sample of 358 teachers in Zamfara State, Nigeria. Data was collected through survey method and was analyzed using both descriptive and inferential (structural equation modeling) statistics analysis. The findings of the study indicated that there is a significant relationship between entrepreneurial leadership, teacher empowerment and school effectiveness. Furthermore, teacher empowerment was found to be a mediator between entrepreneurial leadership and school effectiveness. This implies that the relationship between entrepreneurial leadership and school effectiveness is better enhanced through teacher empowerment.

Key words: Teacher empowerment, entrepreneurial leadership, school effectiveness, better enhanced, mediating effect

INTRODUCTION

The major concerns of the researches on school effectiveness are the issue of what constitutes an effective school. There are serious debates among researchers on what constitutes an effective school. According to Scheerens (2004), it denotes to effectiveness enhancing settings at the school level. It comprises all the factors associated with school such as teaching, learning, administration, student's motivation and community participation. The earlier researches on school effectiveness dwelled much on student's academic achievements and other measures of output of which the modern researches rejected the modern researches focused on other school factors such as students attitude towards learning, classroom conduct and students participation rates (Reynolds *et al.*, 1996). The research of Edmonds (1986) set the base for effective schools. He identified institutional factors such as safe and orderly atmosphere, climate of high expectations, strong instructional leadership, frequent monitoring of pupil progress and opportunity to learn. Prominent researchers such as Lawrence Lezotte have promoted correlates initially introduced by Edmonds. Lezotte and Jacoby (1991) like Edmonds, believes that school culture, a safe and orderly environment, home school relations, instructional leadership, a clear and focused mission, high expectations, frequent monitoring, opportunity to learn and time on task constitutes the features of an effective school.

Educational leadership has been identified to be an indispensable factor of school effectiveness (Kythreotis *et al.*, 2010). It is characterized by the leadership skills being portrayed by the school principal. The principal is expected to facilitate the use of all the available resources (material and human) to facilitate the achievement of the school goals for overall effectiveness (Judge *et al.*, 2001). Developed nation's places greater attention on the role of leadership and entrepreneurial skills of the school principal towards the realization of school effectiveness (Bird *et al.*, 2010). Principals as school heads who are in a position to inspire their followers to poses the skills that will enable them take benefit of that position (Schlechty, 1990). Currently, the act of school leadership is being confronted with with new and sudden tasks due to the advent of globalization and dynamic nature of human beings (Walker and Stewart, 2006). This informs the need for the internalization and application of entrepreneurial leadership practice by school leaders for the realization of an effective school system through the application of entrepreneurial acts such as innovativeness, risk taking and creativity of which other leadership styles are lacking. Basically, entrepreneurial leadership refers to a leadership practice that empowers leaders to confront administrative issues related to their responsibilities and roles in their respective organizations (Dimovski *et al.*, 2013). Thus, school effectiveness would be subject to the competence of a principal in applying entrepreneurial acts in the

school administration. Therefore, since entrepreneurial leadership is concerned with the utilization of competitive advantage the most important source of achieving it is a collection of dedicated, motivated, innovative and competent employees through empowerment of teachers (Jariego, 2015). Empowered teachers have the confidence that their decisions have an impact over the school affairs and take part in the resolving school issues. Successful accomplishment of school goals and objectives is dependent upon teacher empowerment policies. Intensifying appropriate measures to ensure empowerment of teachers requires the attention of the stakeholders saddled with the responsibility of improving the quality of school education as no curriculum can be applied successfully without devoted effort of the teachers.

There is a theoretical gap in literature as regards to the mediating effect of teacher empowerment in the relationship between entrepreneurial leadership and school effectiveness. Most of the related existing researches focused on the relationship between teacher empowerment and school effectiveness and none of the researches focused on the mediating effect of teacher empowerment in Zamfara State and Nigeria as whole. Therefore, the two main objectives of this study are: firstly to determine the relationship between entrepreneurial leadership, teacher empowerment and school effectiveness secondly to determine if teacher empowerment mediates between entrepreneurial leadership and school effectiveness.

Literature review

School effectiveness: The conceptualization of effective schools varies among researchers. Some researchers have concentrated on academic outcome of the students while others concentrated in attitudes and conduct of the students (Dodson, 2005). However, Edmonds (1986) blended the researches and came up with some factors associated with effective schools named as five-factor model of school effectiveness. The factors are, strong administrative leadership, basic skill acquisition, high expectations for student success, a safe and orderly environment and frequent assessing of student achievement (Horner *et al.*, 2009). Similarly, Lezotte and Jacoby (1991) in conducting school effectiveness research identified seven correlates of effective schools which emanated from the original correlates shared by Edmonds (1986) and added two variables through empirical research findings. The correlates are: strong instructional leadership, clear and focused vision and mission, safe and orderly school environment, high expectations for success, continuous assessment of

student achievement, opportunity to learn and time on task and positive home-school relations. Therefore, school effectiveness is a very much wider concept. This is in support with the view by Sammons that definitions on school effectiveness are subject on a number of elements among them sample of schools examined and choice of outcome measured (Sammons *et al.*, 1999). An organization can be characterized as effective if it have attained a high point of goal attainment. The greater the goals are achieved the more effective is the organization. In relating this view to the school, school effectiveness can be assumed as the capacity of a school to accomplish its goals. Therefore, it is maintained that a school is judged as effective provided that the result of its activities meets up with its goals (Mielcarek *et al.*, 2005).

A critical analysis of the reviewed literature on school effectiveness have shown that several definitions of the concept provide divergent views of what an effective school is or what constitutes school effectiveness this diverse views lead to the conclusion that while all reviews assume that effective schools can be differentiated from ineffective ones there is no consensus yet on just what constitutes an effective school.

Entrepreneurial leadership: According to researches on leadership in competitive settings there is a common agreement on the ineffectiveness of most conventional styles and this calls for the adoption of entrepreneurial approaches. The literature on Entrepreneurial leadership came into being as a result of the efforts of researchers to integrate two concepts (entrepreneurship and leadership) into one concept referred to as entrepreneurial leadership (Wen, 2008). The objective was to explore both leadership and entrepreneurial conduct (Sabatier and Weible, 2014). Entrepreneurial leadership is defined as the process of creating an entrepreneurial vision and stimulating followers to endorse the vision in high speed and in unreliable settings (Gupta *et al.*, 2004). This definition has three main components proactiveness which has to do with being active to influence and lead the prospect instead of waiting to be influenced; innovativeness. This is the ability to reason creatively, improve innovative and valuable thoughts in the management of an organization (Gupta *et al.*, 2004). Risk taking is the enthusiasm to absorb uncertainty and take the liability for the prospect. From the above definitions it can be concluded that entrepreneurial leadership is centered on the ability of a leader to create, recognize and explore opportunities in an innovative way (Currie *et al.*, 2008). This study discussed the dimensions of entrepreneurial leadership using (Thomberry, 2006) model, the model came into being by incorporating three different leadership styles

(transformational, transactional and charismatic) leadership styles. Furthermore, the model argued that entrepreneurial leadership practice cut across both personal and organizational levels the model is referred to as a “multi-dimensional approach” due to the fact that it emanated as a result of the combination of three different leadership styles. Thornberry (2006) viewed entrepreneurial leadership as having five major features that include: General entrepreneurial leader behaviour, miner behaviour, accelerator behaviour, integrator behaviour and accelerator behaviour. According to the above definitions and features of entrepreneurial leadership by different researchers, it clearly appeared that entrepreneurial leadership is geared towards developing and realization of organizational mission. The bottom line is on a discovery-driven approach to confronting challenging boundaries and guiding planned commitment to organizational development so that team members will feel that they have the right and the obligation to track out and actualize new opportunities.

Teacher empowerment: The concept of teacher empowerment has been regarded by various researchers as stimulating collegiality, recognizing the influence of teachers on student achievement and providing excellent skilled learning (Zembylas and Papanastasiou, 2005). Decision making regarding teaching and learning is solely the duty of teachers, therefore it is paramount to study the circumstances that will guarantee the effectiveness of teachers are (Kelly, 2012). According to Angelle *et al.* (2011), student’s achievement is central in teacher empowerment. Short and Rinehart (1992) stated that school improvement is dependent upon provision of opportunities for teachers to partake in the process of decision making in key areas within a school. They defined teacher empowerment is defined as a process whereby members grow the capability to take responsibility of their own growth, determine their own problems and develop the confidence that they poses the skills and knowledge to tackle a situation and improve upon it (Short and Rinehart, 1992). According to Spreitzer (1995), the dimensions of empowerment are meaning: it includes a fit between the desires of research role and one’s opinions, beliefs and conducts (Spreitzer, 1995). Competence: denotes to self-efficacy related to a person’s research or a belief in one’s ability to research with talents (Spreitzer, 1995). Self-determination: this is a sense of choice in introducing and controlling one’s actions (Deci *et al.*, 1989). It encompasses a sense of independence or choice over the beginning and furtherance of work conduct and practices. And impact: refers to the ability to influence some key strategic,

administrative or operational outcomes at research. Empowered employees are more productive and more active and they prove to have higher job satisfaction which in turn leads to organizational effectiveness (Mathieu *et al.*, 2006). According to Barroso *et al.* (2008), empowerment is an intermediary variable between transformational leadership and employee effectiveness. Furthermore, Avolio *et al.* (2004) examined the psychological empowerment on the relationship between transformational leadership and organizational commitment and found psychological empowerment is a full mediator in the relationship. Based on the findings of the previous researches, empowerment mediates the relationship between leadership and organizational effectiveness. Thus, researchers proposed that teacher empowerment is a mediator between entrepreneurial leadership and school effectiveness.

Conceptual framework and hypotheses: The conceptual framework of the research on the mediating effect of teacher empowerment between entrepreneurial leadership and school effectiveness is based on three variables and their factors.

The independent variable entrepreneurial leadership is viewed based on Thornberry (2006) model of entrepreneurial leadership consisting of factors that include: miner behaviour, explorer behaviour, accelerators behaviour and lastly integrator behaviour. Teacher empowerment being the mediating variable of the research is viewed from the definition by Spreitzer (1995) with dimensions that include: meaning, self-determination, competence and impact. Lastly, the dependant variable is school effectiveness which is viewed based on Lezzote and Jacoby (1991) definition that conceptualized school effectiveness with features that include: clear and focused mission, high expectations for success, instructional leadership, opportunity to learn on time and task, safe and orderly school environment, positive home-school relations and frequent monitoring of student’s progress. The conceptual framework is presented in Fig. 1.

Figure 1 shows the conceptual framework proposed for the present study. It can be seen from the diagram that the study proposes to examine: based on the outcome of past researches and the conceptual framework, the hypotheses proposed in this study are:

- H₁: there is a significant relationship between entrepreneurial leadership, teacher empowerment and school effectiveness
- H₂: teacher empowerment mediates in the relationship between entrepreneurial leadership and school effectiveness

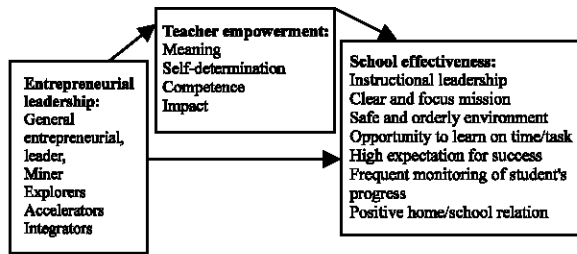


Fig. 1: Conceptual framework

MATERIALS AND METHODS

Participants: The population of the study consisted of all the serving teachers in the government owned secondary schools in Zamfara State, Nigeria. According to the records there are 4996 teachers serving in 191 secondary schools across the state. Cochrans (2007) was used to determine the sample size. Consequently, the total recommended sample size for this study is 357. Furthermore an additional 10% was added to the minimum sample to take care of non-response from the teachers during the data collection process (Rea *et al.*, 2012). Therefore, the total sample distributed is 393 to teachers all over the state. The choice of the participants was made through a multistage random sampling due to the reason that all the teachers possess the same characteristics. According to the results of the descriptive statistics, among the participants, 58% are male while 41.1% are females. In terms of educational qualification, 11.15% of the respondents were holders of master degrees, 57% were holders of bachelor of education degrees and 31.6% were having Nigerian Certificate in Education.

Instrumentation: Three instruments were adopted to measure the variables of the research. For school effectiveness, Lezzote and Jacoby (1991) 5 Likert type scale instrument ranging from (strongly disagree, disagree, slightly agree, agree and strongly agree) with 38 items was adopted. The instrument consists of seven dimensions that include: instructional leadership, clear and focused mission, safe and orderly environment, high expectations, frequent monitoring of student's progress, opportunity to learn/time on task and positive home/school relations. The instrument is having a Cronbach's alpha value of 0.949 and composite reliability of 0.913. Moreover, indices of confirmatory factor analysis (GFI = 0.896, AGFI = 0.876, RMSEA = 0.35) show that the model fits with the data which indicates that the instrument is reliable and valid. Similarly, Entrepreneurial Leadership Questionnaire (ELQ) developed by Thornberry (2006) was adopted to measure

entrepreneurial leadership practice, it is a five Likert type scale consisting of 50 items measuring five dimensions of entrepreneurial leadership including General Entrepreneurial Leader Behavior (GELB), Explorer Behavior (EXPB) Miner Behavior (MINB), Accelerator Behavior (ACCB) and Integrator Behavior (INTB). The instrument have Cronbach's alpha value of 0.963 and composite reliability of 0.896. Moreover, indices of confirmatory factor analysis (GFI = 0.853, AGFI = 0.834, RMSEA = 0.042) this shows that the model fits with the data which indicates that the instrument is reliable and valid. Furthermore, in order to measure teacher empowerment, psychological empowerment instrument (Spreitzer, 1995) with 12 items covering four dimensions of meaning, competence, self-determination and impact by was adopted. The instrument recorded a Cronbach's alpha value of 0.839 and composite reliability of 0.835. Moreover, indices of confirmatory factor analysis (GFI = 0.964, AGFI = 0.940, RMSEA = 0.053) this shows that the model fits with the data which indicates that the instrument is reliable and valid.

RESULTS

Data analysis and findings: The data was analyzed using descriptive statistics in order to present the demographic features of the respondents and Structural Equation Modeling (SEM) with AMOS 22.0 was used to determine the relationship between variables under study as well as the mediating effect of the mediating variable. Based on the SEM model the structural model of the study was found to fit with the data (GFI = 0.892, AGFI = 0.861, RMSEA = 0.66)

The results and discussions of the objectives of the study are based on the structural model of the study as shown in Fig. 2.

Relationship between entrepreneurial leadership, teacher empowerment and school effectiveness: In this study, the hypotheses that hypothesized the relationship between entrepreneurial leadership, teacher empowerment and school effectiveness have been tested. Summary of the regression coefficient estimates is presented in Table 1:

- H_{31} : there is a significant relationship between entrepreneurial leadership, teacher empowerment and school effectiveness

According to the results from Table 1 there is a significant correlation between entrepreneurial leadership and school effectiveness ($\beta = 0.710$, $p = 0.001$). Similarly,

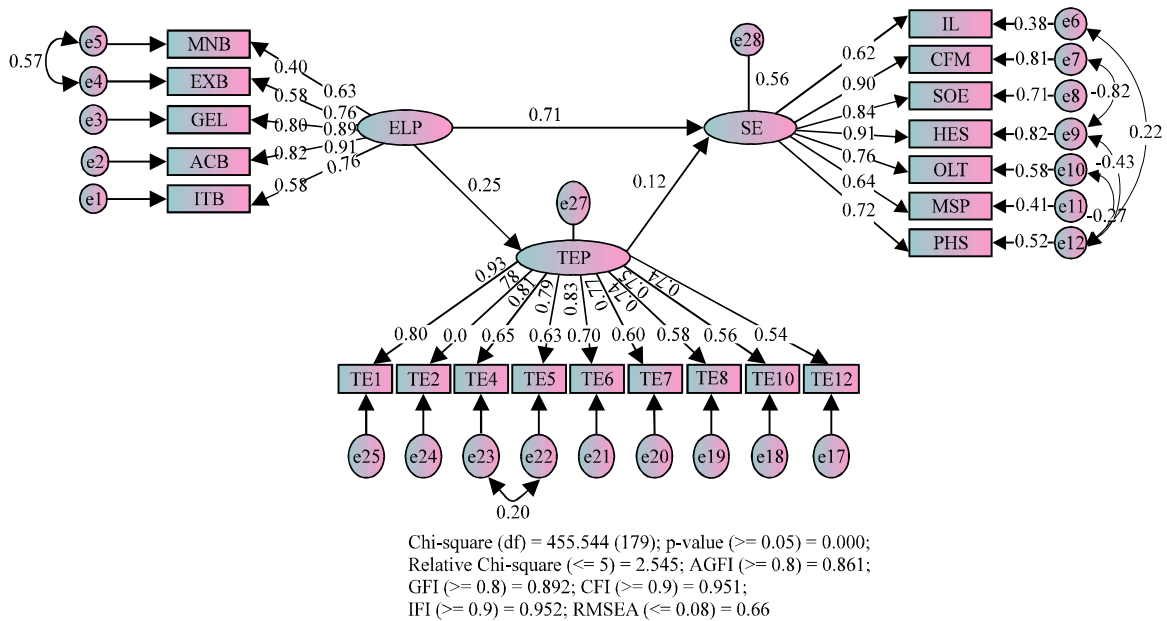


Fig. 2: Structural model of the study

Table 1: Unstandardized and standardized regression weights in the hypothesized path model

Paths models	B	SE	β	CR	p-values
School effectiveness \leftarrow Entrepreneurial leadership	0.483	0.049	0.710	9.864	0.001
Teacher empow \leftarrow Entrepreneurial leadership	0.333	0.076	0.254	4.405	0.001
School effectiveness \leftarrow Teacher empowerment	0.061	0.022	0.117	2.816	0.050

B = Unstandardized regression weight estimate; SE = Standard Error; β = Standardized regression weight; CR = Critical Ratio; p = Significant alpha

Table 2: Distinguishing mediating effect of teacher empowerment

Variables	Total effect	p-value	Direct effect	p-value	Indirect effect	p-value	Result
ELP \rightarrow TEP \rightarrow SE	0.740	<0.05	0.710	<0.05	0.30	<0.05	Partially mediated

there is a significant relationship between entrepreneurial leadership and teacher empowerment ($\beta = 0.254$, $p = 0.001$). Furthermore, the results have shown that there is a significant relationship between teacher empowerment and school effectiveness ($\beta = 0.117$, $p = 0.05$). This means that entrepreneurial leadership, teacher empowerment and school effectiveness are significantly related. Therefore, the hypothesis is accepted.

Mediating effect of teacher empowerment between entrepreneurial leadership and school effectiveness:

To test for the mediating effect of teacher empowerment between entrepreneurial leadership and school effectiveness, Baron and Kenny, mediation approach was used for the indirect effect test. Findings of the mediation effect are shown in Table 2:

- H_{a2} : teacher empowerment mediates between entrepreneurial leadership and school effectiveness

As shown in Table 2, there is an evidence of indirect effect of entrepreneur leadership on school effectiveness through teacher empowerment. The estimate of direct effect of entrepreneur leadership on school effectiveness was found to be significant ($\beta = 0.710$, $p < 0.05$) also the Standardized Indirect Effect (SIE) of entrepreneur leadership on school effectiveness through teacher empowerment was significant ($\beta = 0.030$, $p < 0.05$). This means there is significant indirect effect of entrepreneurial leadership on school effectiveness through teacher empowerment. Therefore, the study proves that teacher empowerment is a mediator in the relationship between entrepreneurial leadership and school effectiveness. Therefore, the hypothesis is accepted.

DISCUSSION

According to the results of the study, there is a strong relationship between entrepreneurial leadership practice and school effectiveness ($\beta = 0.710$, $p = 0.001$). This means that entrepreneurial leadership leads to the

attainment of school effectiveness. This denotes that the ability of school principal to be innovative and creative by supporting the bending of the school rules when they appear to be obstacles to the realization of school goals, takes in to consideration the views of school stakeholders complaints, provide an enabling environment where risk taking is stimulated and risk taking will increase the level of school effectiveness.

The findings of Gupta *et al.* (2004) who found a significant relationship between entrepreneurial leadership and organizational effectiveness are similar with the findings of this study, according to him scenario enactment and cast enactment dimensions of entrepreneurial leadership stimulates organizational effectiveness. Equally, the findings of this research are in agreement with Pihie *et al.* (2014) who established significant correlation between teacher's perceptions of the importance of the school principal's entrepreneurial leadership practices and school innovativeness. According to their findings the more principals implement entrepreneurial leadership practice, the more the schools will be innovative. Moreover, Xaba and Malindi (2010) reported that entrepreneurial leadership addresses some challenges faced by schools that include shortage of resources, high population of students among others. Thus, principal that practice entrepreneurial leadership is most likely to have effective schools.

The current study found, a positive and significant relationship between entrepreneurial leadership and teacher empowerment ($\beta = 0.261, p = 0.001$). This means that entrepreneurial leadership increases mean score of teacher empowerment. In essence, applications of entrepreneurial leadership in a school make teachers to be more confident about their job and understanding the basic skills required for performing their duties effectively. This is similar to the findings (Suyitno *et al.*, 2014) who found that that school principals make use of some strategies that include creating some innovations refining curriculum and learning all with a view to empower teachers to diligently conduct their functions. Furthermore, a great number of researches such as (Avolio *et al.*, 2004) who had found positive relationship between leadership and staff empowerment. The researchers highlighted the role of leadership in forming more social relationship with the organization in making followers to have a sense of empowerment.

This current research established a significant relationship between teacher empowerment and school effectiveness ($\beta = 0.094, p = 0.001$). Thus, empowering teachers lead to the actualization of an effective school system. This indicates that if teachers are given autonomy to decide on their jobs, carried along in school decision

making and given the opportunity to widen their knowledge through in-service trainings the school will be more effective. This is in line with Lee and Nie (2013) who found significant correlations between the principal effectiveness and teacher empowerment. Specifically, teachers in the study who consider their principals to be highly effective recounted higher scores of empowerment.

On the other hand, the current study has established that teacher empowerment partially mediates in the relationship between entrepreneurial leadership and school effectiveness. However, there is lack of empirical researches that investigate mediating role of teacher empowerment, especially in relationship with entrepreneurial leadership and school effectiveness, nonetheless there are some researches that were conducted to study the mediating effect of teacher empowerment and other similar constructs of job satisfaction and the findings of the researches are in harmony with the findings of the current research for instance (Shapira and Tsemach, 2014) established that teacher empowerment mediates the relationship between principal's authentic leadership and organizational citizenship behavior, according to his findings when teachers are empowered they have the confidence that they have impact on the decisions taken in the school. Thus, they feel inspired and become more effective in handling their job. By establishing the mediating effect of teacher empowerment on entrepreneurial leadership and school effectiveness this study make available the critical role entrepreneurial leadership has in school effectiveness through teacher empowerment.

CONCLUSION

This study aims to explain the relationships between entrepreneurial leadership, teacher empowerment and school effectiveness using structural equation model. Structural equation modeling results indicate that the proposed model fits well with the data. The results have shown that there is a significant relationship between entrepreneurial leadership, teacher empowerment and school effectiveness. Furthermore, teacher empowerment was found to be a mediator in the relationship between entrepreneurial leadership and school effectiveness. With all these lines this article emphasizes on the mediating role of teacher empowerment towards achieving an effective school system. The implication is that the findings highlight the need for school principals to employ the elements of entrepreneurial leadership for the attainment of effectiveness. The ministry of education, policy makers and other stakeholders also has a task of planning and

formulating policies and programs that would facilitate the application of entrepreneurial features at the same mediating with teacher empowerment in the daily administration of their schools for the attainment of an affective school system. Although, this study provides a better understanding of the mediating effect of teacher empowerment between entrepreneurial leadership and school effectiveness it only focused on secondary schools in Zamfara State, Nigeria. Therefore, the findings cannot be generalized to Nigeria as a whole. Future research is needed to study the same variables in other states of Nigeria and other educational levels.

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