

*Full Length Research Paper*

# **Principal's perceived leadership effectiveness and its relationship with academic achievement among students in secondary school: The Ethiopian experience**

**Dessalegn Feyisa, Bekalu Ferede and Frew Amsale\***

College of Education and Behavioral Sciences, Jimma University; Ethiopia.  
Jimma University College Of Education and Behavioral Sciences Department of Educational Planning and Management, Ethiopia.

Received 28 December, 2015; Accepted 3 June, 2016

---

The school principal's role in determining the academic achievement of students has been an agenda of controversy among scholars in the field of educational leadership. Several studies, have been carried out, over the years, to resolve this controversy. However, the findings so far have not produced consistent outcomes pointing to the need for further research in differing socio-cultural settings. The main objective of this study was to investigate the relationship between secondary school principals' leadership effectiveness as perceived by secondary school teachers and students' academic achievement West Hararghe Zone, Oromia Regional State, Ethiopia. For this, the study employed correlation design comprising of eight randomly sampled secondary schools. In this study, a total of 190 teachers were selected using a proportional random sampling technique to fill in a standardized questionnaire on the leadership effectiveness of their school principals. Out of 3321 students who sat for Grade 10 national examinations in 2014, the Cumulative Grade Point Average (CGPA) scores of 440 students was selected from the sampled schools using proportional random sampling technique. A standardized questionnaire with five-point Likert scales was used to measure the leadership effectiveness of principals whereas CGPA of students on Grade 10 national examination was used to measure students' academic achievement. The findings of the study showed that the experience of principals was not significantly correlated with their corresponding leadership effectiveness. The findings also showed that the principals level of education was significantly negatively correlated with principals' leadership effectiveness ( $R = -0.866$ ,  $p < 0.05$ ). Furthermore, the study findings showed that there was no significant correlation between a school principal's leadership effectiveness and students' academic achievement. The latter finding implies that there was no direct relationship between school leadership and students' academic achievement. In addition, the findings suggest that the relationship between principals' level of education, service year, and leadership effectiveness was not direct. The researchers, therefore, recommended further research on a large scale and in different contexts to come up with more valid and generalizable finding.

**Key words:** Leadership, effectiveness, students' academic achievement, secondary school principal.

---

## INTRODUCTION

The aspirations of the policy makers' across the globe to minimize the persistent disparities in educational achievements observed among students with diversified backgrounds coupled with "the idea that leadership especially that of the principal, matters in determining levels of school effectiveness and of student achievement" (Ribbins, 2002: 6) have been yielding in growing interests among researchers to study on how educational leaders influence an array of student academic outcomes (Robinson et al., 2008). Consequently, various studies have been carried out in different countries and at different schools levels to investigate the correlations between educational leaders and student academic outcomes, (Gaziel, 2007; Louis et al., 2010; Mphale and Mhlauli, 2014; Tatlah et al., 2014; Yesuf, 2016).

Moreover, as indicated by Robinson et al. (2008) "at least five reviews of empirical research on the direct and indirect effects of leadership on student outcomes have appeared recently" (P. 636). Despite such massive effort to study the influences of the principals effectiveness over students' academic achievement, the issue of whether such influences are direct or indirect is still controversial and debatable (Leithwood et al., 2006).

Hallinger and Heck (1998) reviewed studies pertaining to principal effects on students' academic achievement appeared in between 1980 and 1998. Accordingly, they classified the findings of their review into three models by adopting Pinter's framework of organizing and conceptualizing studies on principals' effects. These three models are the direct effect model, the mediated effect model, the reciprocal effect model.

The direct effect model presumes that not only leaders place effects on school outcomes but also such outcomes can be measured without taking other related variables into consideration. Due to this underlying assumption of the direct effect model that "the leader's effects on school outcome occur primarily in the absence of intervening variables," most studies adopting this model tend to be bivariate (Hallinger and Heck, 1996: 18)

According to these reviews, though the combined direct and indirect effects of principals' on students' outcomes are small, they are educationally significant (Hallinger and Heck, 1996). The authors emphasized that administrative leadership in which principals are engaged in such activities as setting expectations and staff selection was among the factors that made the greatest difference in student understanding and learning. In this regard, Waters and Marzano (2006: 6) stated that "Principal leadership does have discernable effects on

student achievement. In fact, we found the correlation between school-level leadership and average student achievement in schools to be 0.25". The 0.25 correlation between the principals' leadership and students' academic achievements indicates that school leaders that are highly effective can intensely influence the overall academic achievement of students (Waters et al., 2005). Despite significant differences between the responses of the principals and the teachers involved in the study, the study by Tatlah et al. (2014), also underpinned a significant effect of principals behavior on students' academic achievement.

Researches in the second category are those who claim that the effects of principals over students' academic achievement are only indirectly and through other variables. These studies of the mediated effects model emphasize that principals influence some intermediary variable(s), which in turn affect the students' academic achievements (Hendriks and Steen, 2012). As reported in these studies, principals influence the academic achievements of students through affecting such intermediary variables as the school's environment (Al-Safran et al., 2013) teachers' satisfaction, commitment to work (Ibrahim and Al-Taneiji, 2013) and teachers' beliefs (Ross and Gray, 2006). This, in turn, relies, among other things, "on how well these leaders interact with the larger social and organizational context in which they find themselves." (Leithwood et al., 2004: 25).

The third categories of researches, instead of examining overall leadership effects of the principals, inquire about the effects of specific leadership practices or styles. These studies are labeled as the reciprocal effect models (Al-Safran et al., 2013). For these studies, as the relationship between the principals and the characteristics of schools and their environment are interactive, the effects of the principals over students' academic achievements are attributed to the specific practices of the principals or the particular leadership style of the principals as per the particular demands of the school situations (Hallinger and Heck, 1996, 1998). A meta-analysis of all studies involving district leadership in the USA from 1970 until 2003, carried out by Waters et al. (2003) could be a leading work in this category. The meta-analysis examines the effects of principals' on student achievement and came up with 21 leadership responsibilities that are believed to be significantly associated with student achievement (Waters and Cameroon, 2007). Waters and Cameroon (2007: 7), pointed out that they "found statistically significant correlation between school-level leadership and students' academic achievement" and as a result, they hope that

\*Corresponding author. E-mail: [frew.amsale@ju.edu.et](mailto:frew.amsale@ju.edu.et)/ [efukoye@gmail.com](mailto:efukoye@gmail.com). Tel: +251911712535.

"No longer is there a question about the effect of leadership on students' achievement".

Within the reciprocal-effect category, there are still segments of studies that attribute the effects of principal's leadership on students' academic achievement to the particular leadership style that the principals adopt. Marks and Printy (2003), for example, pointed out that significant achievement of students are evident when transformational and shared instructional leaderships coexist in an integrated form of leadership. Bolam et al. (1993) also have identified that participative leadership mediated through teacher activity contributed effectively to student outcomes.

In general, studies in the reciprocal model attribute students' academic achievement to either particular leadership styles (Marks and Printy, 2003) or to certain leadership practices sought to be effective in enhancing students' academic achievement (Waters et al., 2003). Put it another way, what principals' do and the way they do it in a particular school setting affects the academic achievements of their students.

The above lines of argument, suggest the need for further research investigating the correlation between principals' leadership effectiveness and students' academic achievement as being vital for theoretical as well as practical reasons. Such studies are vital in various cultural and political contexts as culture has a substantial impact on the principal's leadership style (Al-Safran et al., 2013), on one hand. On the other hand, previous researches carried in different countries yield in divergent findings pertaining to the effects of principals over students' academic achievements (Waters et al., 2003). This study therefore attempted to investigate the relationship between principals leadership effectiveness and students academic achievement in secondary schools of Ethiopia with a focus on West Hararge Zone Secondary Schools.

## STATEMENT OF THE PROBLEM

Among the major persistent education-related challenges that Ethiopia has been facing, over the years, is the issue of quality education. Following the formulation of Education and Training Policy (MOE, 1994), the Ethiopian government has taken different measures to alleviate those educational problems and remarkable changes have been exhibited in education expansion. According to Ministry of Education (MoE, 2010), the efforts made to strengthen professional skills of school principals and the school improvement process which has been in place is part of the endeavor to looking for the solutions of education quality problems. Despite all the efforts made the question of whether a school principal can impact the students' academic achievement is still not clearly figured out.

The relationship between principals' effectiveness and students' academic achievement is debatable. There have been inconsistent findings in the studies on how school leadership is related to students' academic achievement. Some studies claim that principals can contribute a significant positive impact, be it direct or indirect, on school improvement in general and student academic achievement in particular (Branch et al., 2013; Louis et al., 2010). Long ago, others argued that the effectiveness of school principals in contributing to students' achievement remains a topic of debate that is yet to be resolved (Firestone and Herriott, 1982; Grift, 1990; Rowan et al., 1982). These conflicting results suggest that there needs to be a further investigation regarding the issue in focus. This study was, therefore, designed to investigate the relationship between leadership effectiveness of school principals as perceived by secondary school teachers and students' academic achievement in Ethiopian Secondary schools, with a focus on West Hararghe Zone. Accordingly, the study was designed to answer the following basic questions:

- (1) What is the level of principal's leadership effectiveness of secondary school principals at West Hararghe Zone, Oromia Region, Ethiopia?
- (2) What are the determinants of principal's leadership effectiveness in the secondary schools at West Hararghe Zone, Oromia region, Ethiopia?
- (3) How does principal's leadership effectiveness affect student's academic achievement in secondary schools at West Hararghe Zone, Oromia region, Ethiopia?

## PURPOSE OF THE STUDY

The purpose of this study was to investigate the level of leadership effectiveness in the secondary schools at West Hararge Zone, Oromia, Ethiopia and examine whether the principal's leadership effectiveness can significantly influence the students' academic achievement in the secondary schools at West Hararghe Zone, Oromia, Ethiopia.

## Study variables

### *Leadership effectiveness*

Leadership effectiveness is the successful exercise of personal influence of one or more people with the aim of accomplishing organizational objectives through obtaining the followers' approval (Cooper et al., 2004). In line with this, scholars in the field of educational leadership have made several attempts to identify components of effective school leadership of which Leithwood (1994) is the one who has six components.

**Table 1.** Population and sample size by sample schools.

| Schools  | Teachers 2007 |     |      | Students 2006 |     |      |
|----------|---------------|-----|------|---------------|-----|------|
|          | N             | n   | %    | N             | n   | %    |
| Badessa  | 52            | 31  | 59.6 | 616           | 70  | 11.4 |
| Barkume  | 30            | 21  | 70   | 329           | 65  | 19.8 |
| Burka    | 10            | 9   | 90   | 48            | 24  | 50   |
| Chercher | 77            | 42  | 54.5 | 1046          | 81  | 7.7  |
| Dabaso   | 24            | 18  | 75   | 226           | 40  | 17.7 |
| Galamso  | 59            | 34  | 57.6 | 598           | 75  | 12.5 |
| Mechara  | 36            | 23  | 63.9 | 324           | 55  | 17   |
| Wachu    | 14            | 12  | 85.7 | 134           | 30  | 22.4 |
| Total    | 302           | 190 | 63.6 | 3321          | 440 | 13.2 |

N= Population size, n= Sample size.

The tool contains six major dimensions of effective school leadership. These are: building school vision and goals; providing intellectual stimulation; offering individualized support; symbolizing professional practices and values; demonstrating high-performance expectations; and developing structures to foster participation in school decisions. The leadership effectiveness of the secondary school principals was measured as perceived by the teachers in the schools. The 5-point rating scale with 1 = ineffective, 2 = minimally effective, 3 = effective, 4 = highly effective and 5 = outstandingly effective was also adopted from Porter et al. (2010) to indicate the level of effectiveness of the principals. The target of the rating scale was chosen to be "effectiveness," rather than frequency [or agreement], to point to effectiveness, because of the belief that some behaviors might be important but infrequent (Porter et al., 2010).

### **Students' academic achievement**

According to Ward et al. (1996), academic achievement is the outcome of education-the extent to which a student, teacher or institution has achieved their educational goals and is commonly measured by examinations or continuous assessment. For the purpose of this study, academic achievement was measured by students' grade 10 national examination results. The examination results were cumulative grade point average (CGPA) on a four-point scale in which Mathematics, English and Civics subjects are compulsory of the 10 subjects included in the examination.

## **RESEARCH DESIGN AND METHODOLOGY**

### **Research design**

Correlation study design was used in order to examine the relationship between the principal's leadership effectiveness and students' academic achievement in secondary schools.

### **Sample size and sampling technique**

From the total of 23 schools found in the zone, 8 of them were excluded as their principals did serve for less than 2 years in those schools. Similarly, teachers with less than 2 years of stay in those schools were excluded from the sample as they were supposed not to have adequate stay in the school to rate the effectiveness of principals' leadership.

Sampling was conducted at two stages. First, 8 out of the remaining 15 schools were selected by lottery method. Secondly teachers and students were selected from the sampled schools. Accordingly from the total of 302 teachers teaching in the sampled schools, 192 (63.6%) were selected using stratified proportional random sampling technique. In addition, 10<sup>th</sup> grade national examination result of 440 (13.2%) students, were selected from the sampled schools using proportional simple random sampling technique. Table 1 shows the distribution of the samples in relation to their respective population for each of the 8 schools.

### **Instruments of data collection**

Questionnaire was used to collect data from teachers on the leadership effectiveness of the secondary school principals. The questionnaire used for measuring leadership effectiveness was the one which was developed by Leithwood and Jantzi (1999). The questionnaire consists of 32 items designed to measure six major components of leadership, namely; promoting professional practice, participatory decisions, providing support, intellectual stimulation, high performance expectations and setting school vision. The items were rated on 5-Point Likert-type scale ranging from Ineffective =1 to Outstandingly Effective = 5.

### **Students' achievement records**

Students' academic achievement was measured by CGPA of students on grade 10 national examination. The researchers have obtained the CGPA of student from record offices of the respective schools. The scale of CGPA of students on national examination ranges from 0 to 4.

### **Data analysis procedures**

The data gathered through questionnaire was analyzed by using

**Table 2.** Mean score leadership effectiveness of principals.

| School   | Mean effectiveness of principals on the six variables |      |                         |      |            |      |             |      |                   |      |               |      | Grand mean |      |
|----------|---|------|-------------------------|------|------------|------|-------------|------|-------------------|------|---------------|------|------------|------|
|          | Professional practice                                 |      | Participatory decisions |      | Supporting |      | Stimulation |      | High Expectations |      | School vision |      |            |      |
|          | $\bar{X}$   | SD   | $\bar{X}$               | SD   | $\bar{X}$  | SD   | $\bar{X}$   | SD   | $\bar{X}$         | SD   | $\bar{X}$     | SD   | $\bar{X}$  | SD   |
| Badessa  | 4.23  | 0.77 | 3.96                    | 0.82 | 3.81       | 0.98 | 4.10        | 0.72 | 4.15              | 0.82 | 4.07          | 0.88 | 4.05       | 0.83 |
| Barkume  | 4.16  | 0.95 | 3.74                    | 1.11 | 3.78       | 1.14 | 3.88        | 1.07 | 3.84              | 1.21 | 3.64          | 1.20 | 3.84       | 1.11 |
| Burka    | 4.17  | 0.64 | 4.17                    | 0.75 | 3.64       | 0.99 | 4.16        | 0.88 | 4.44              | 0.58 | 4.33          | 0.51 | 4.16       | 0.77 |
| Cherchar | 3.71  | 1.00 | 3.39                    | 1.13 | 3.34       | 1.04 | 3.32        | 1.03 | 3.48              | 0.94 | 3.25          | 1.01 | 3.41       | 1.04 |
| Dabaso   | 4.13  | 1.16 | 4.29                    | 0.90 | 4.07       | 0.88 | 4.29        | 0.84 | 4.18              | 0.98 | 4.11          | 1.00 | 4.19       | 0.97 |
| Galamso  | 4.06  | 0.84 | 3.93                    | 0.90 | 4.09       | 0.76 | 4.11        | 0.74 | 4.08              | 0.70 | 4.10          | 0.71 | 4.06       | 0.78 |
| Machara  | 4.33  | 0.75 | 3.90                    | 0.98 | 3.90       | 1.00 | 4.00        | 0.97 | 4.00              | 0.86 | 3.97          | 1.00 | 4.03       | 0.94 |
| Wachu    | 4.05  | 0.89 | 3.88                    | 0.78 | 3.75       | 0.87 | 3.86        | 0.89 | 3.83              | 0.75 | 3.83          | 0.85 | 3.88       | 0.85 |
| Total    | 4.07  | 0.92 | 3.83                    | 1.00 | 3.77       | 1.00 | 3.90        | 0.95 | 3.94              | 0.93 | 3.84          | 0.99 | 3.89       | 0.97 |

Principal is not satisfactorily effective for  $\bar{X} < 2.75$ , satisfactorily effective for  $2.75 \leq \bar{X} < 3.5$ , and highly effective for  $\bar{X} \geq 3.5$ .

descriptive statistics such as frequency counts, mean and standard deviation. Similarly, the student CGPA was analyzed by using frequency counts, mean and standard deviation. The researchers also run analysis of variance (ANOVA) to see if there are significant differences among sampled schools in terms of leadership effectiveness and students' academic achievement. Correlation analysis was computed for the total sample to see if there is significant relationship between principals' experience, length of stay in the same school, level of education and their leadership effectiveness. In addition, the correlation analysis was used to see the extent of relationship between the six dimensions of leadership effectiveness and students CGPA.

## RESULTS

In this part the results of the study will be presented in two sections. While the first presents demographic characteristics of principals and teachers, the second will present results pertaining leadership effectiveness of principals, relationship between demographic variables of principals and their leadership effectiveness and the relationship between students' academic achievement and leadership effectiveness of principals.

### Characteristics of the study participants

#### Characteristics of the secondary school principals

The principals participated in the study had served as a school principal for 3 to 17 years ( $M=5.63$ ) and every principal in the sample has worked for at least 2 years at the present school ( $M=3.63$ ). Pertaining the principals' educational levels, 87.5% of them hold Bachelor Degree while the remaining 12.5% hold Master's Degree.

#### Characteristics of respondent teachers

Out of 165 teachers who returned the questionnaire with

complete information, 19 (11.5%) were females indicating few numbers of female teachers in the sampled schools. The great majority, 162 (98.2%) of respondent teachers hold Bachelor degree. The rest 2 (1.2%) were diploma holding teachers and 1 (0.6%) was masters' degree holding teacher. Besides, regarding the teaching experiences of teachers participated in the study, the majority, 55 (33.3%) of them have served between 6 to 10 years, while 48 (29.1%), 32 (19.4), 12 (7.3%), of them have served for 2 to 5 years, 21 and more years and 16 to 20 years respectively.

### Leadership effectiveness of school principals

Brief note on school principal's leadership effectiveness. Table 2 presents the mean score values of principals' leadership effectiveness scores. As shown in Table 2, the school principals were generally perceived to be highly effective in their leadership by the teachers ( $\bar{X} = 3.89$ ,  $SD = 0.97$ ). However, principals of Dabaso ( $\bar{X} = 4.19$ ,  $SD = 0.97$ ) and Burka ( $\bar{X} = 4.16$ ,  $SD = 0.77$ ) secondary schools were relatively perceived to be highly effective while principals of Charchar ( $\bar{X} = 3.41$ ,  $SD = 1.04$ ) and Barkume ( $\bar{X} = 3.84$ ,  $SD = 1.11$ ) were rated to be relatively less effective. Coming to individual variables of leadership, professional practice ( $\bar{X} = 4.07$ ,  $SD = 0.92$ ) and high performance expectation ( $\bar{X} = 3.94$ ,  $SD = 0.93$ ) were highly rated with compared to others.

In order to see if there is a significant leadership effectiveness difference among the sample school principals, ANOVA was used to get the results of Table 4. In this table it was shown that there were leadership effectiveness differences between groups. Table 3 shows that there is a significant difference between the leadership effectiveness of the sample school principals  $F(7, 157) = 4.88$ ,  $p < 0.05$ . In order to see the differences between pairs of principals' effectiveness Post Hoc Test

**Table 3.** ANOVA for leadership effectiveness of principals.

| Groups         | SS     | Df  | MS    | F     | P     |
|----------------|--------|-----|-------|-------|-------|
| Between Groups | 11.839 | 7   | 1.691 | 4.880 | 0.000 |
| Within Groups  | 54.409 | 157 | 0.347 |       |       |
| Total          | 66.248 | 164 |       |       |       |

**Table 4.** Post hoc test for leadership effectiveness of principals.

| School      | Charchar | Dabaso | Galamso | Machara | Wachu  |
|-------------|----------|--------|---------|---------|--------|
| 1. Badessa  | 0.63*    |        |         |         |        |
| 2. Barkume  | 0.42*    |        |         |         |        |
| 3. Burka    | 0.73*    |        |         |         |        |
| 4. Charchar |          | -0.76* | -0.64*  | -0.60*  | -0.45* |

\*. The mean difference is significant at the 0.05 level.

**Table 5.** Inter correlation matrix for leadership effectiveness of principals and demographic variables.

| Variables              |            | 1       | 2     | 3     | 4 |
|------------------------|------------|---------|-------|-------|---|
| 1. Effectiveness       | P. Correl. | 1       |       |       |   |
| 2. Education level     | P. Correl. | -0.87** | 1     |       |   |
| 3. Total Experience    | P. Correl. | 0.37    | -0.05 | 1     |   |
| 4. Stay in Same School | P. Correl. | -0.52   | 0.14  | -0.46 | 1 |

\*\*Correlation is significant at 0.01 level (1-tailed).

was conducted. Table 4 shows that the difference in leadership effectiveness of principals was significant between Badessa and Charchar, Barkume and Charchar, Burka and Charchar, Charchar and Dabaso, Charchar and Galamso, Charchar and Machara and Charchar and Wachu schools only.

#### Correlation between demographic variables of principals and their leadership effectiveness

From Table 5, it can be seen that only the educational level of principals significantly correlate with the leadership effectiveness of principals,  $p < 0.05$ . Experience and stay of principals in the school did not significantly relate with their leadership effectiveness in the sampled schools. The result shows that level of education negatively correlated to leadership effectiveness of principals. That is the higher the educational level, the lower the leadership effectiveness of the principals. This might be due to the fact that some principals assume leadership position without having adequate experience though they possess relatively higher education level. However, the study showed that

there is no significant relationship between leadership effectiveness of principals and their total service year and stay in the current school.

#### Students' Academic achievement measured in CGPA

As depicted in Table 6, the highest students' CGPA values was observed in Burka ( $\bar{X} = 2.64$ ,  $SD = 0.42$ ), Badessa ( $\bar{X} = 2.45$ ,  $SD = 0.63$ ) and Wachu ( $\bar{X} = 2.41$ ,  $SD = 0.72$ ) secondary schools. And the smallest student CGPAs was observed in Barkume ( $\bar{X} = 2.03$ ,  $SD = 0.54$ ) and Charchar ( $\bar{X} = 2.07$ ,  $SD = 0.63$ ) secondary school. ANOVA was run in order to see if there is between schools differences in terms of the CGPAs attained at school levels. From Table 7, GPAs of sample students indicated that there is significant mean difference between the school level CGPAs of the students ( $F = 2.88$ ,  $p < 0.05$ ). To further identify between which pairs the differences occurred among the school CGPAs, Post Hoc Test was carried out as shown in Table 8.

There is a significant difference between Badessa and Barkume, Badessa and Charchar, Barkume and Burka, Barkume and Galamso, Barkume and Wachu, Burka and

**Table 6.** Sample Student CGPAs by sample schools (N = 440).

| School     | N  | $\bar{X}$ | SD   |
|------------|----|-----------|------|
| Badessa    | 70 | 2.45      | 0.63 |
| Barrkume   | 65 | 2.03      | 0.54 |
| Burrka     | 24 | 2.64      | 0.42 |
| Charchar   | 81 | 2.07      | 0.63 |
| Dabaso     | 40 | 2.19      | 0.81 |
| Galamso    | 75 | 2.37      | 0.77 |
| Machara    | 55 | 2.17      | 0.61 |
| Wachu      | 30 | 2.41      | 0.72 |
| Grand Mean |    | 2.29      | 0.64 |

A pass GPA is judged to be 2.00 or above for grade 10 national exams, according to the rules of the MoE.

**Table 7.** ANOVA for sample student CGPA for the sampled schools.

| Groups         | Sum of squares | df  | Mean square | F     | P     |
|----------------|----------------|-----|-------------|-------|-------|
| Between Groups | 7.066          | 7   | 1.009       | 2.880 | 0.007 |
| Within Groups  | 55.021         | 157 | 0.350       |       |       |
| Total          | 62.086         | 164 |             |       |       |

**Table 8.** Post Hoc test for sample students' GPAs.

| Variables | Barkume           | Burka              | Charchar          | Dabaso            | Galamso            | Machara           | Wachu              |
|-----------|-------------------|--------------------|-------------------|-------------------|--------------------|-------------------|--------------------|
| Badessa   | 0.46 <sup>*</sup> |                    | 0.37 <sup>*</sup> |                   |                    |                   |                    |
| Barkume   |                   | -0.73 <sup>*</sup> |                   |                   |                    |                   |                    |
| Burka     |                   |                    | 0.64 <sup>*</sup> | 0.52 <sup>*</sup> | -0.48 <sup>*</sup> | 0.50 <sup>*</sup> | -0.46 <sup>*</sup> |
| Charchar  |                   |                    |                   |                   | -0.39 <sup>*</sup> |                   |                    |

\*. The mean difference is significant at the 0.05 level.

Charchar, Burka and Dabaso, Burka and Machara, and Charchar and Galamso schools (Table 8). The highest difference in the same table was observed between Burka and Barkume whereas, the lowest was observed between Badessa and Charchar schools. A relatively better CGPAs were observed in Burka school, where as the lowest was observed in Charchar school.

### Students' CGPA and principals' effectiveness dimensions

In order to see the correlation among the principals' leadership variables and student GPAs, inter correlation analysis was made (Table 9). Table 9 depicts that there is no any leadership dimension which is significantly correlated with student GPA 2006. The result therefore shows that there is no significant relationship between

principals' leadership effectiveness and students' academic achievement in the sampled schools.

### DISCUSSION

One of the major finding of this study is that there is significant negative relationship between level of education of principals and their leadership effectiveness. This finding must be understood with caution because in the study area teachers can assume principal position without having the required experience and track record but having the required level of education. In this case principals with more teaching and leadership experience may perform better even though they have the minimum required level of education.

This finding contradicts with the finding of several studies. A related study by Eyike (2001) for instance

**Table 9.** Inter Correlation Matrix for Leadership Effectiveness and students' GPAs.

| Variables               | 1      | 2       | 3       | 4       | 5       | 6       | 7 |
|-------------------------|--------|---------|---------|---------|---------|---------|---|
| 1. GPA 2006             | 1      |         |         |         |         |         |   |
| 2. Prof. Practice       | -0.033 | 1       |         |         |         |         |   |
| 3. Involve in Decisions | -0.076 | 0.563** | 1       |         |         |         |   |
| 4. Support              | -0.054 | 0.447** | 0.692** | 1       |         |         |   |
| 5. Stimulating          | 0.021  | 0.529** | 0.681** | 0.744** | 1       |         |   |
| 6. High expect          | 0.045  | 0.583** | 0.569** | 0.617** | 0.693** | 1       |   |
| 7. School vision        | .046   | 0.581** | 0.721** | 0.685** | 0.731** | 0.771** | 1 |

\*\* Correlation is significant at the .01 level (1-tailed).

showed that principals who completed in-service trainings were more effective than those who did not. An important implication of his study is that professionally trained principals perform their roles better than non-professionals. Amanchi (1998) also reported that teachers who complete degrees in education more professional outputs than those who do not. It is believed that specialized training empowers and motivates such teachers for better performance. Amanchi (1998) also reported that teachers who complete degrees in education more professional outputs than those who do not. It is believed that specialized training empowers and motivates such teachers for better performance. For the purpose of this study, only the number of years that the principals have worked shall constitute experience.

The study also showed that there is no significant relationship between leadership effectiveness of principals and their total service year and stay in the current school. This finding is in line with the findings of the study carried out in Pennsylvania in that the contributions of the principal's service year and stay in the current school to the students' academic achievements found out to be statistically indistinguishable from the average value-added of all school leaders in the state (Teh et al., 2010). However, this finding contradicts with the findings of some similar studies. For instance a study by Okolo (2001) on the performances of primary school headmasters, results showed that there was a significant difference in performance between primary school head teachers with duration of experience ranging from 4 to 11 years and those with 20 years of experience and above. One can thus infer that experience significantly contributes to difference in head teachers' performances. Alily's (2000) study, also showed that there is a significant difference between medium-experienced and short-experienced teachers. Trained principals perform their roles better than non-professionals.

We have also found no significant relationship between principals' leadership and students' academic achievement. This finding is in line with the finding of several studies which showed that there is no direct

relationship between school leadership and students' academic achievement (Al-Safran et al., 2013) Cheng (cited in Bell et al., 2003).

## Conclusions

The study found out that students' academic achievement is not a direct function of principals' leadership effectiveness. This implies that there is no direct relationship between school leadership and students' academic achievement. Leadership may indirectly affect students' academic achievement through improving school climate, teachers' morale, commitment and motivation.

## IMPLICATIONS

This study was undertaken by taking sample schools from one zone in Ethiopia. In order to come up with more valid findings the researchers recommend further research on large scale in different contexts.

## Conflict of Interests

The authors have not declared any conflict of interests.

## REFERENCES

- Alily TN (2000). An analysis of factors influencing secondary school student's academic performance in Edo State. (Unpublished doctoral dissertation). University of Benin, Nigeria.
- Al-Safran E, Brown D, Wiseman A (2013). The effect of principal's leadership style on school environment and outcome. *Res. Higher Educ. J.* 22:1. Retrieved from <http://www.aabri.com/manuscripts>
- Amanchi D (1998). Accountability in Nigeria schools: Towards a posture for better education. *J. Nigerian Educ. Res. Assoc.* 1(2):85-91.
- Bell L, Bolam R, Cubillo L (2003). A systematic review of the impact of school head-teachers and principals on student outcomes.
- Bolam R, McMahon A, Pocklington K, Weindling D (1993). Effective management in schools. A report for the Department for Education via the School Management Task Force Professional Working Party, 2:7.



- Branch GF, Hanushek EA, Rivkin SG (2013). School leaders matter. *Educ. Next*, 13(1).
- Eyike RE (2001). An evaluation of secondary school principals in Edo State. Thesis: University of Benin, Nigeria.
- Firestone WA, Herriott RE (1982). Prescriptions for effective elementary schools don't fit secondary schools. *Educ. Leadersh.* 40(3):51-53.
- Gaziel HH (2007). Re-Examining the Relationship between Principal's Instructional/Educational Leadership and Student Achievement. *J. Soc. Sci.* pp. 17-24 .
- Grift WVD (1990). Educational leadership and academic achievement in elementary education. *School Effectiveness School Improvement*, 1(1):26-40.
- Hallinger P, Heck RH (1996). The principal's role in school effectiveness: An assessment of methodological progress, 1980-1995 (723-783). In: K. Leithwood, J. Chapman, D. Corson, P. Hallinger, & A. Hart (Eds.), *International handbook of educational leadership and administration*. Dordrecht, Netherlands: Kluwer Academic Publishers.
- Hallinger P, Heck RH (1998). Reassessing the principal's role in school effectiveness: A review of the empirical research, 1980-1995. *Educ. Adm. Q.* 32(1):5-44.
- Ibrahim A, Al-Taneiji S (2012). Principal leadership style, school performance, and principal effectiveness in Dubai schools. *Int. J. Res. Stud. Educ.* 2(1):41-54.
- Leithwood K, Day C, Sammons P, Harris A, Hopkins D (2006). Seven strong claims about successful school leadership. England: NCSL.
- Leithwood K, Jantzi D (1999). The relative effects of principal and teacher sources of leadership on student engagement with school. *Educ. Adm. Q.* 35(5):679-706.
- Leithwood K, Seashore Louis K, Anderson S, Wahlstrom K (2004). Review of research: How leadership influences student learning.
- Louis KS, Dretzke B, Wahlstrom K (2010). How does leadership affect student achievement? Results from a national US survey. *School Effectiveness School Improvement* 21(3):315-336.
- Marks HM, Printy SM (2003). Principal leadership and school performance: An integration of transformational and instructional leadership. *Educ. Adm. Q.* 39(3):370-397.
- Marzano RJ, Waters T, McNulty BA (2005). *School leadership that works: From research to results*. ASCD.
- MOE (2010). *Education Sector Development Program IV (ESDP IV) 2010/2011 – 2014/2015 2003 EC – 2007 EC*. Addis Ababa.
- MOE (1994). *Education and training policy*. Addis Ababa.
- Mphale LM (2014). The effectiveness of teachers' professional development initiatives in enhancing teachers' growth in Botswana secondary schools.
- Okolo WO (2001). An evaluation of the performance of primary school headmasters in Oredo LGA of Edo State. (M.Ed. Thesis). University of Benin, Nigeria.
- Ribbins P (2002). Regarding Principals: Leadership Effects and the Effectiveness and Improvement of Schools. In K.-c. Wong, & C. W. Evers, *Leadership for Quality Schooling: International Perspective* (pp. 12-35). New York: Taylor & Francis e-Library.
- Robinson VM, Lloyd CA, Rowe KJ (2008). The impact of leadership on student outcomes: An analysis of the differential effects of leadership types. *Educational Administration Quarterly*.
- Ross JA, Gray P (2006). School leadership and student achievement: The mediating effects of teacher beliefs. *Canadian J. Educ. Revue canadienne de l'éducation* pp. 798-822.
- Rowan B (1982). Methodological Considerations in Studies of Effective Principals.
- Tatlah IA, Iqbal MZ, Amin M, Quraishi U (2014). Effect of Leadership Behaviour of Principals on Students' Academic Achievement at Secondary Level: A Comparison of the Leaders and Teachers Perceptions. *J. Res. Reflections Educ. (JRRE)* 8(1).
- Teh BR, Chiang H, Lipscomb S, Gill B (2014). *Measuring School Leaders' Effectiveness: An Interim Report from a Multiyear Pilot of Pennsylvania's Framework for Leadership*. REL 2015-058. Regional Educational Laboratory Mid-Atlantic.
- Waters T, Cameron G (2007). *The Balanced Leadership Framework: Connecting Vision with Action*. Mid-continent Research for Education and Learning (McREL).
- Waters TJ, Marzano RJ (2006). *School District Leadership That Works: The Effect of Superintendent Leadership on Student Achievement*. A Working Paper. Mid-Continent Research for Education and Learning (McREL).
- Waters T, Marzano RJ, McNulty B (2003). *Balanced Leadership: What 30 Years of Research Tells Us about the Effect of Leadership on Student Achievement*. A Working Paper.
- Yusuf AF (2016). Influence of Principals' Leadership Styles on Students' Academic Achievement in Secondary Schools. *J. Innovative Res. Manage. Humanities* 3(1).