

Effectiveness of Principals' Leadership Styles in School Improvement and Students' Academic Achievement in Government Secondary Schools of Oromia Regional State, Ethiopia

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Abstract

This paper aimed at assessing the effectiveness of principals' leadership styles in school improvement and students' academic achievement in government secondary schools of Oromia region, Ethiopia. In this study, descriptive survey was employed and as such the data were collected by using questionnaires developed and pilot tested by the researchers. The study analyzed zones' school inspection reports on the schools' levels measured per as standards set by the Federal Ministry of Education and students' academic results obtained from National Education Assessment and Examination Agency of three years (2017-2019). The study employed clustering, stratified and purposive sampling techniques to select 6 zones of Oromia region out of 20; 80 sample secondary schools out of 307 and 160 principals out of 240 and all of 320 teachers, respectively. The collected data were analyzed using descriptive statistics such as means and standard deviations and independent samples t-test. The findings of this study revealed that practical implementations of transformational, instructional and transactional school leadership styles were above average. However, no changes were observed in standards of the secondary school because about 86.3% of the schools were found below the expected standards and students' academic achievements became decreasing with fluctuating within the three years. Results indicate that effectiveness of the principals' school leadership styles was not at its expected level in transforming the schools to the required standards and bringing about sustainable academic achievement. This calls for extra efforts and commitment primarily from the principals in order to reverse these conditions.

Keywords

School Improvement, Academic Achievement, Secondary Schools

1. Introduction

Leadership is one's potential to inspire confidence and support among the people who needed to achieve organizational goals (Yukl, 2010; Romano, 2014). An effective leadership has been a major area of concern in many educational reforms in the 2000s as can be seen from reports by Mourshed, Chijioke and Barber (2010). In addition, effective leadership and management are increasingly recognized as vital components of successful schooling (Bush, 2011). Day et al. (2009) in their study of successful school leadership stated that improving schools are places where there are demonstrated and sustained student achievement gains over a number of years. Over time, small improvements lead to sustained improvement of practice within a school. Here leadership necessarily convinces people serving in a given institution and needs to be effective in order to achieve its goal educational.

Leadership style is the relatively consistent pattern of behavior that characterizes a leader (DuBrin, 2016). Hussin & Waheed (2016) argue that the most recognized leadership styles in school contexts are instructional, transformational and moral. In organizations like schools where tasks are routine and can be measured consistently, the use of transactional leadership may be more appropriate than the use of transformational leadership (Breevaart et al., 2014). With this regard, Mulford (2008) often appreciates and advocates more adaptive and multiple oriented leadership styles rather than using a single and rigid leadership style. With this regard, transformational leadership is a leadership style in which the school principal will guide and encourage fellow staff to work, communicate the schools' goal and empower them to achieve the schools' vision (Anantha, 2017).

Study conducted by Leithwood, Jantzi & McElheron-Hopkins (2006) has suggested that leadership style is the second biggest influence on student learning, just behind classroom teaching. Relevant literatures of, for instance, Heck & Hallinger (2014), Dhuey and Smith (2014) have also stated that teachers' professional quality has significant influence on students' academic achievement. In this case, Hallinger's (2010) review of empirical research on principals' school leadership inferred that the principals could have indirect positive effects on student achievement. Moreover, Barber & Mourshed (2007) proposed that "the quality of an education system cannot exceed the quality of its teachers", therefore "the only way to improve outcomes is to improve instruction". From these literatures, one can understand that teachers have major contribution to the improvement of the school which is mainly measured by student learning outcomes.

According to Robinson, Hohepa, & Lloyd (2009) the school improvement literature internationally affirms that effective school leadership is an important condition for a successful school with other contributing factors such as the characteristics and development of effective school managers and leaders. In this case, evidence about the characteristics and practices of effective school leaders' centers mainly on the work of principals, notwithstanding current interest internationally in sharing and distribution of leadership practice and influence. In the process of school improvement principals have irreplaceable roles and responsibilities as they are primary leaders of the school.

However, there is less research-based evidence and consensus on the characteristics and practices of effective school leaders in developing country contexts, particularly, to enactment of new expectations for instructional leadership and school improvement. Research on school management and leadership for improvement in these schools is not yet well developed (Nimisha & Musa, 2018; Robinson et al., 2009). Currently, In Ethiopia, there is also a strong need to address a perceived decline in educational quality through nationally mandated programmes for school improvement (MoE, 2015). Therefore, it was believed that this study could meet the national need and has an international contribution to the existing literature through assessing effectiveness of principals' school leadership styles in school improvement.

The challenges of schools and quality of education in Ethiopia are among the major persistent problems that the country has been facing for years. The main challenges identified include limited capacity of management at sector and school level; limited school improvement Programme (SIP) implementation capacity at both *woreda* and school levels; unsustainable monitoring and evaluation system of SIP and students' low academic achievement (MoE, 2010). Recently, result of national study demonstrates that school leadership in Ethiopia could not solve challenges of education system through organizing work forces and engaging stakeholders in school activities in order to improve students' learning outcomes including academic achievement (MoE, 2017).

Following the formulation of Education and Training Policy (MoE, 1994), the Ethiopian government has devised different intervention strategies and programs to alleviate those educational challenges. The strategies include introduction of General Education Quality Improvement Program (GEQIP) with the purpose mainly to improve quality of education, within the framework of education and training policy (MoE, 2008), launching Education Sector Development Programs (ESDPs, I-V) among which the ESDP-III gave strong emphasis to strengthen the capacity of the education system; improve the school effectiveness and management and expand access to education (MoE, 2005: p. 4).

In addition to the above programs, efforts are made to improve professional skills of school principals and the school improvement process, which has been in place, is part of the endeavor for the solutions of education quality problems (MoE, 2010). Consequently, as other studies show, Ethiopia has made significant

progress in providing citizens, especially students, with access to education. However, still there is a serious lack of quality of education that must be addressed (EDA, 2010; Sitota & Masresha, 2019). In addition, the education system was characterized by low quality of outputs (MoE, 2015: p. 19; World Bank, 2017). These studies indicate that students' academic achievement as one of key indicators of education quality is not in progress through years.

The MoE (2017) also outlines that poor leadership is one of the main contributing factors for low quality of education that is characterized by scoring below 50 percent, particularly, in natural science subjects in national as well as classroom exams; students' misbehaviors; presence of considerable rate of dropout and repetition. Most of these problems were resulted from the fact that many students did not only consider goals of learning, but they were also not equipped with adequate knowledge, skills and right attitudes on lessons rather they focused plainly on promotion from grade to grade by cheating in the exams.

In relation to the effects of principals' leadership on students' academic achievement, numerous studies have been conducted globally. For instance, Shuti (2019) carried out a study to determine the role of transformational school leadership in promoting teacher commitment in South Africa; Nimisha & Musa (2018) conducted a research on leadership styles of school administrators and teacher in Nigeria and concluded that transformational leadership style is found to be the most effective type of leadership style used by school administrators and Nazlina and Thangaveloo (2021) investigated the relationship of transformational and transactional principal leadership on teacher job satisfaction and secondary student performance in Malaysia. So far, these empirical researches have not been conducted in Ethiopia regarding school leadership.

In Ethiopian context, as available literatures show, some researchers studied about principals' school leadership in different ways. Among those Feyisa, Ferede, & Amsale (2015) found that there was no significant association between a school principal's leadership effectiveness and students' academic achievement and thus was no direct relationship between school leadership and students' academic achievement. This study covered only a zone of Oromia regional state and it was devoted to analyzing the association between the principals' effectiveness and students' academic achievement by employing quantitative research methods only.

While Belayne's (2016) findings reveal that secondary school principals lacked certain transformational leadership behavior and there was positive association between transformational school leadership and student achievement. Likewise, Minalu (2016) found that lack of capacity building and poor school leadership and management were among major challenges of implementing the school improvement programme. However, none of these empirical studies have focused on effectiveness of principals' leadership styles in secondary schools' improvement. The reviewed literatures so far clearly show that, in spite of those multifaceted efforts were there in the place, the question of quality of education in

Ethiopia still remains unsolved.

In context of this study, school improvement denotes strategy for school change that focuses on the learning and achievement of students (Hopkins, 2005; MoE, 2015) as a result of improved standards or levels of the schools in terms of inputs, process and output (MoE, 2013). For this effect, appropriate leadership styles in school contexts such as transformational, instructional and transactional (Hussin & Waheed, 2016) have paramount contributions to overall betterment of school performance if they are effectively practiced in an integrated manner. Above all, transformational and transactional leadership styles are the best approaches to sufficiently measure effectiveness of the principals' school leadership (Bass & Avolio, 1995). Therefore, this study was designed to assess the extent to what the school principals have been effectively practicing the leadership styles for school improvement and to investigate a correlation between levels of the schools and students' academic achievement. In line with the above objectives, the study attempted to answer three research questions:

- 1) What are the dominant school leadership styles of the principals in the study area?
- 2) To what extent the principals do practice leadership styles for school improvement?
- 3) What relationship exists between levels of schools and students' academic results?

2. Research Methods

2.1. Description of the Study Area

Oromia region, which is one of the nine national regional states of Ethiopia, has 20 zones including Finfine/Addis Ababa special zone and 19 city administrations. The region is the largest and the most populous of the rest regions of the country with a land area of 363,375 sq km (about 32% of the country) and its population was about 41,000,000 accounting for 37% of the entire population (UNESCO, 2016). It has relatively large number of educational institutions at different levels. These institutions are 14,470 elementary schools (1st-8th grades) 1137 secondary schools (9th and 10th grades), 384 preparatory schools (11th and 12th grades), 13 universities and 13 Colleges of Teachers' Education (OEB, 2019). As illustrated in **Figure 1**, the region stretches across central Ethiopia and shares boundaries with Kenya, South Sudan and all the other regional states except Tigray (BoFED, 2013).

2.2. Research Design

To achieve the objectives of this study descriptive survey research design involving a quantitative approach was employed. This design involves the collection of data so that information can be quantified and subjected to statistical treatment in order to support or refute alternative knowledge claims (Williams, 2011). Moreover, it employs strategies of inquiry that are surveys and collecting

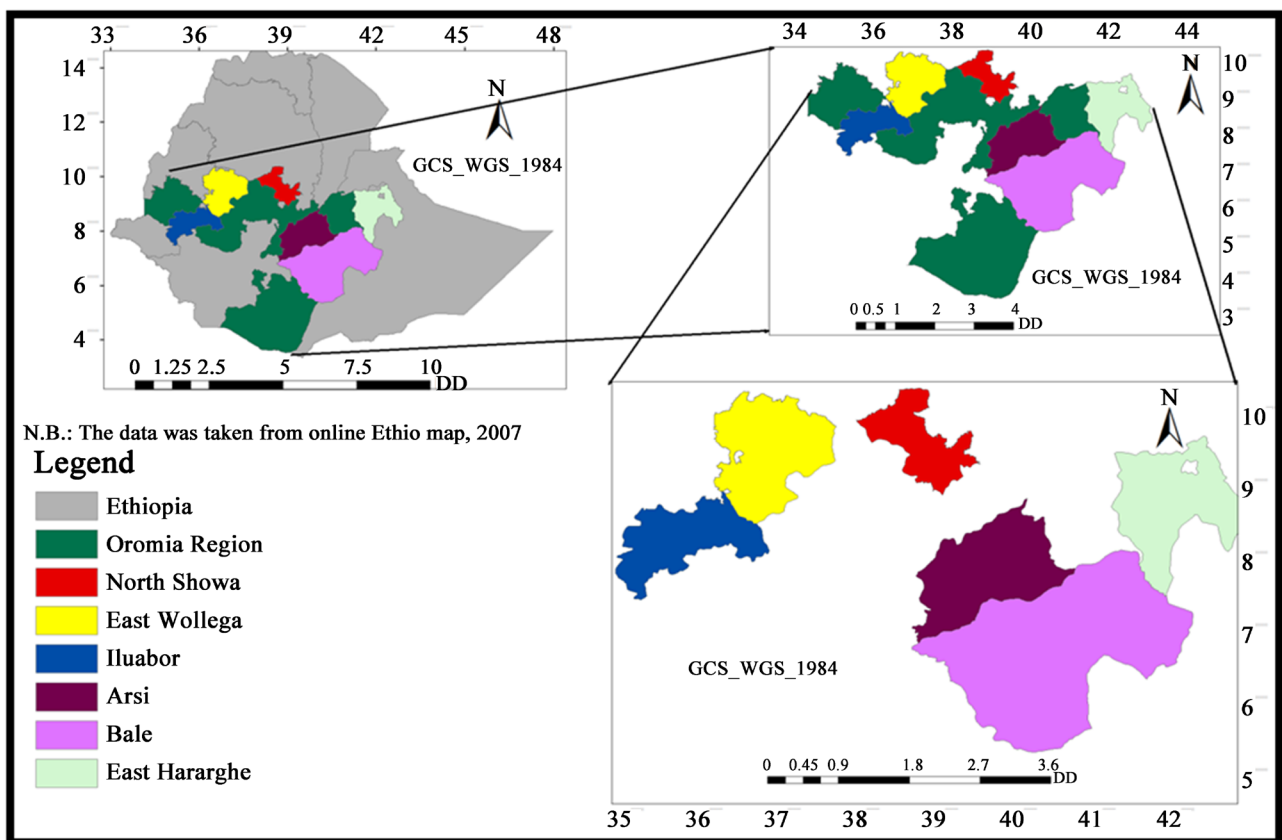
data on predetermined instruments that yield statistical data (Creswell, 2003).

2.3. Sources of Data

For the purpose of this study, relevant and related data were collected from both primary and secondary sources. The primary sources of data were the target secondary schools' principals and teachers (heads of debarments). On the other hand, the secondary data sources were inspection reports on levels of the secondary schools and students' academic results of the two compulsory subjects obtained from National Education Assessment and Examination Agency, Addis Ababa. This study relied on three consecutive years' results of national examination because they were standardized test.

2.4. Population, Sample Size and Sampling Techniques

The researchers have selected representative sample zones by clustering Oromia region into five geographical positions. These are: north, west, south, east, and central Oromia. The sample zones drawn from these clusters were: east Hararghe, north Shewa, Bale, Iluababor, east Wellega and Arsi. These zones were located astronomically between 5° - 10° North Latitudes and 35° - 43° East Longitudes (Figure 1).



Source: Own construction using data taken from online Ethiopian map of 2007.

Figure 1. Map of the study area.

Basically, clustering as one of many types of sampling techniques is employed where the whole population is divided into groups and then a random sample is taken from these clusters (Wilson, 2010). Then, from the five clusters of the region the researchers took 6 (30%) zones by applying simple random sampling technique. This sample size is representative of the 20 zones in the region and it enables the researchers to conduct survey study because scholars suggest that a minimum sample size should be 30 percent of the target population (Cohen, Manion, & Morrison, 2004).

In the sample zones, there were 307 government secondary schools (9th and 10th grades) out of which 80 (26%) were selected by stratifying the schools into two categories on the basis of the principals' work experiences followed by simple random sampling techniques. This technique is employed as it helps to divide the population into homogenous groups and is mostly applied when population spread over different areas (Andale, 2015). Accordingly, the researchers have divided the secondary schools into two stages on the basis of principals' current service years. First, about 165 schools, whose principals served for less than three years, were purposively omitted. Second, among the remaining ones (142), 80 secondary schools were selected by lottery methods after all of the 142 schools were listed and numbered. The basic rationale for employing lottery method is that it is the most applicable technique of simple random sampling where the sample size is relatively small (Daniel, 2012).

Regarding respondents size, all principals and one of the two vice principals who served for more than 3 years in the sampled secondary schools (80) were participants of the study. In other words, 160 principals were respondents of this study. On the other hand, by using purposive sampling technique, the researchers took 4 teachers (heads of department of social sciences, languages, mathematics and natural sciences) from each of 80 sample government secondary schools.

2.5. Instruments of Data Collection

Questionnaire: it was the main data gathering instrument from predetermined respondents. This study employed Multifactor Leadership Questionnaire developed by the researchers (self-made items) in reference to the MLQ-related to transformational, transactional and laissez-faire- applied by Demissie (2017) in one of Ethiopian Governmental Technical and Vocational Education and Training (TVET) colleges. For this study, the MLQ consisting of 5-point Likert's rating scales (strongly agree, agree, undecided, disagree, strongly disagree) was found an appropriate and useful instrument in assessing and measuring effectiveness of principals' school leadership styles in school improvement. In order to check reliability, pilot testing was conducted prior to use the MLQ for actual data collection. Accordingly, the questionnaire items were pilot tested in three secondary schools of east Hararghe zone of Oromia region which were outside of the sample ones.

As shown **Table 1**, the internal consistency reliability was found above .70 except for items of transactional leadership style. This implies that almost all items used so as to collect quantitative data were fairly judged as acceptable (Creswell, 2009; George & Mallery, 2009).

Document analysis: It focused its attention on levels/standards of secondary schools in terms of inputs, process and outputs with placing more emphasis on outputs (students' academic achievement) on the basis of school inspection reports of zone education offices in the sampled zones of the Oromia region. In the analysis of academic results, special attention was given to the two compulsory subject (English and mathematics) in the school improvement program in Ethiopia (MoE, 2011) because it is widely believed that students showing better academic performance in both subjects are most likely expected to score the best results in the other academic subjects.

School inspection in Ethiopian case is the process of quality assurance which is used to evaluate an overall performance of a school based on clearly defined standards and criteria (MoE, 2010, 2015). It is considered as a powerful tool for promoting improvement by establishing the minimum levels of quality that all schools should achieve in terms of input, process and output. The inspection classifies the school into four levels indicating that: level 1 scoring below 50% is found at early stage, level 2 scoring 50% - 69.99% is fulfilling its standard, level 3 scoring 70% - 89.99% is at required standard and level 4 scoring 90% - 100% is highly standardized (MoE, 2013). The analysis covered status of the schools' levels and students' academic achievement within three consecutive years (2017-2019). However, in the year of 2020, academic results were not found because of structural change of education system in Ethiopia, that is, preparatory (11th and 12th grades) and secondary (9th and 10th grades) schools were merged together and the national examination will be given at grade 12.

2.6. Methods of Data Analysis

The collected data through using questionnaires were checked for completion and usage, and then classified and tabulated. The data were summarized and analyzed by using descriptive statistics such as means and standard deviations. To do so, the data were first edited, coded and entered into Statistical Package

Table 1. Results of reliability test for questionnaire items used.

Style of leadership	No. of respondents (157 principals and 312 teachers)	No. of items used	Cronbach's Alpha value
Transformational style	469	12	0.85
Instructional style	469	16	0.89
Transactional style	469	12	0.71
Total	469	40	0.82

Source: Computed from survey data, 2020.

for Social Sciences (SPSS Software) 22.0 version. The researchers employed independent samples t-test to find out significant means difference at 0.05 level of significance on the basis of responses given by the principals and teachers. The study applied this test as two groups of samples involved in the study and it is an appropriate inferential statistic in assessing whether the means of two groups of respondents are statistically different from one other (Ajai & Sanjaya, 2009: p. 52).

3. Results and Discussion

As stated earlier, the sample of this study comprised of principals and teachers of government secondary schools (9th and 10th grades). Out of a total of 480 respondents, 469 (157 principals and 312 teachers) of them completed in and returned the questionnaires. This made the return back rate of the survey data 97.8%. Accordingly, all of the questionnaires collected were used for analysis through SPSS software.

According to norms set by Bass and Avolio (2000) for classifying dominant leadership styles, aggregate mean rating scores of the respondents were compared. As can be seen in Table 2, the mean rating score of the respondents indicated that the principals adopted transformational leadership with mean 3.67 which is greater than means of the rest two leadership styles. As the norm, mean score for all of the three leadership styles was >3.0 but transformational was found the most dominant one practiced. Therefore, transformational leadership was identified as the dominant leadership style of the principals in the study area.

In Table 3(a), mean scores of principals ($M = 3.92$, $SD = 1.35$) and teachers

Table 2. Identification of a dominant of leadership styles practiced in the study area.

Form of leadership style	Mean Respondent (N = 469)	Std. Deviation Respondent (N = 469)	Indep. samples t-test		
			Df	t-value	p-value
a. Transformational	3.67	1.09	327.4	1.09	0.207
b. Instructional	3.58	0.97	326.9	1.76	0.179
c. Transactional & passive avoidant factors	3.29	1.17	322.9	1.48	0.207

*The mean difference is significant at the 0.05 level.

Table 3. Practices of transformational leadership style and results of statistical analyses.

Dimension of transformational leadership	Mean		Std. Deviation		Indep. samples t-test		
	Principals (N = 157)	Teachers (N = 312)	Principals (N = 157)	Teachers (N = 312)	Df	t-value	p-value
a. Idealized influence	3.92	3.83	1.35	0.99	341.4	0.97	0.530
b. Inspirational motivation	3.74	3.62	1.09	1.14	325.8	1.08	0.286
c. Intellectual stimulation	3.64	3.45	1.15	1.23	327.7	1.33	0.242
d. Individualized consideration	3.64	2.35	1.14	1.15	314.5	0.99	0.34

($M = 3.83$; $SD = 0.99$) revealed implementation of idealized influence (behavior and attribute) was above average with the principals' (self-raters) rating was slightly greater than that of the teachers (raters). The computed independent samples t-test result, $t(341.4) = 0.97$, $P = 0.530$ verified that there was statistically no significant difference between the mean scores of the two groups of respondents, because the p-value is greater than 0.05 level of significance. This implies that level of agreement of the two groups about practices of the sub-dimension of style of transformational leadership was the same. The overall average mean score of the respondents ($M = 3.88$) enables one to deduce that the principals were relatively effective in practicing the dimension to a great extent in their respective secondary schools.

Table 3(b) mean scores of principals ($M = 3.74$; $SD = 1.09$) and teachers ($M = 3.62$; $SD = 1.14$) pointed out that inspirational motivation was being carried out above middle point (2.5) for staff members. Here a slight difference was observed in mean score of the two groups of respondents; that is, principals' level of agreement was higher than that of the teachers. However, as indicated in the Table, the computed t-test result, $t(325.8) = 1.08$, $P = 0.286$ demonstrated that there was statistically no significant means difference between score ratings of the principal and teacher respondents. This means that the principals more or less did what expected of them in day-to-day activities of school management and leadership.

As can be seen from **Table 3(c)**, mean scores of principals ($M = 3.64$; $SD = 1.15$) and teachers ($M = 3.45$; $SD = 1.23$) revealed that the principals (self-raters) practiced intellectual stimulation above middle point (2.5) in their respective secondary schools. Moreover, the computed t-test result, $t(327.7) = 1.33$, $P = 0.242$ supported that there was statistically no significant difference between the mean scores rated by the two groups of respondents.

Overall results showed that effectiveness of the principals in implementing elements of intellectual stimulation such as challenging assumptions and taking risks of school leadership was good, but it indicates still strong extra efforts are needed so as to realize improvement of sampled secondary schools. The finding supported views of [Ogola, Sikalieh and Linge \(2017\)](#) that intellectual stimulation leaders continuously impart, exemplify, promote and acquire new resourceful ideas for solving problems from all organizational followers.

It is portrayed in **Table 3(d)** that the mean scores of principals ($M = 3.64$; $SD = 1.14$) and teachers ($M = 2.35$; $SD = 1.15$) showed that the principals implemented individualized consideration above average in their respective secondary schools. As the results, the principals rated themselves higher than what the teachers (raters) did. This variation in mean scores implies that principals exaggerated their performance when compared with the results of their raters and/or teachers' understanding about accomplishment of the dimension was less. However, the calculated t-test result, $t(314.5) = 0.99$, $P = 0.34$ verified that there was statistically no significant difference between means of the two groups of respondents, because the p-value is greater than 0.05 level of significance. The

overall mean score (2.99) of the respondents indicated that practical implementation of individualized consideration was greater than the average or cut-point (2.5) in context of the study area.

As pointed out by Northouse (2013), high scores on individualized consideration and inspirational motivation factors are most indicative of strong transformational leadership, however, the principals were weak particularly at implementing individualized consideration in the study area.

3.1. Practices of Instructional School Leadership Style

The respondents were requested to reveal level of their agreement about the practices of the instructional leadership styles in their respective secondary schools. Accordingly, their views are depicted in Table 4.

As can be seen from Table 4(a) mean scores of principals ($M = 3.87$; $SD = 0.95$) and teachers ($M = 3.75$; $SD = 1.01$) revealed that the principals articulated and effectively communicated shared mission of the school to the staff for future school improvement; likewise, they formulated and articulated common and specific goals that help to realize vision of the school. As this result, effectiveness of the principals was good since the level of their performance as was above the average.

Further analysis of independent samples t-test also confirmed what has been presented by the mean values. The test result, $t(330.7) = 1.29$, $P = 0.225$ demonstrated that the difference in mean scores of principals and teachers was not statistically significant since the p-value is greater than 0.05 level of statistical significance verifying that the respondents, to more extent, agreed upon the accomplishment of the components of instructional school leadership.

Table 4(b) presents mean scores of principals ($M = 3.68$; $SD = 1.03$) and teachers ($M = 3.51$; $SD = 1.15$) indicating that the principals allocated available school resources sufficiently and fairly to support staffs' professional growth and

Table 4. Implementation of instruction leadership style and results of statistical analyses.

Activities of instructional leadership School principals ...	Mean		Std. Deviation		In dep. samples t-test		
	Principals (N = 157)	Teachers (N = 312)	Principals (N = 157)	Teachers (N = 312)	Df	t-value	p-value
a. articulate and communicate vision and goals	3.87	3.75	0.95	1.01	330.7	1.29	0.225
b. allocate resources	3.68	3.51	1.03	1.15	329	1.54	0.124
c. coach, monitor, evaluate and encourage staffs, and provide opportunities for development	3.64	3.48	0.82	0.84	237.4	0.09	0.141
d. stimulate professional discussion and decision-making, develop spirit of professional competition and strengthen parent-community-school relationship	3.59	3.42	1.08	1.14	328.4	1.59	0.137
e. motivate and encourage staffs and provide with moral supports	3.73	3.49	1.09	1.13	323	2.21	0.057

development. As the results mean values of the two groups of respondent showed that the performance of the principals was above average. Furthermore, the computed independent samples t-test result, $t(345.1) = 1.54, P = 0.124$ indicated that there was statistically no significant difference between the mean scores rated by the two groups of respondents regarding accomplishment of the tasks, because the p-value is greater than 0.05 level of significance.

As shown in **Table 4(c)**, mean scores of principals ($M = 3.64; SD = 0.82$) and teachers ($M = 3.48; SD = 0.84$) indicated that performance of the principals in coaching, monitoring, evaluating and encouraging school staffs, and providing the staffs with all available opportunities for professional development and growth was above average. The mean values depicted that the principals rated higher score when compared with what the teachers did but the computed t-test result, $t(237.4) = 0.09, P = 0.141$ assured that there was statistically no significant difference between the mean scores rated by respondents of the two groups indicating that their views were the same regarding the practices of these leadership activities.

As indicated in **Table 4(d)**, mean scores of principals ($M = 3.59; SD = 1.08$) and teachers ($M = 3.42; SD = 1.14$) showed that the principals stimulated professional discussion with staff on new reform initiative and involved the teachers in decision-making related to programs and instruction of the school, developed spirit of professional competition; created possible opportunities for the teachers to learn from each and made great effort to strengthen parent-community-school relationship to participate actively in school management and students' learning activities. Furthermore, the computed independent samples t-test result, $t(328.4) = 1.59, P = 0.137$ confirmed that there was statistically no significant difference between the mean scores of the two groups as the p-value is greater than 0.05 level of significance.

As indicated in **Table 4(e)**, mean scores of principals ($M = 3.73; SD = 1.09$) and teachers ($M = 3.49; SD = 1.13$) showed the principals motivated staffs to perform their respective duties more than what the staffs planned; encouraged the staffs and provided moral support by making teachers feel appreciated for their contribution to the effectiveness of school. As the mean values show, practical implementation of these varied activities was more than average but not to maximum level and the principals ratings (self-raters) were greater than that of the teachers (raters).

However, the t-test result, $t(323) = 2.21, P = 0.057$ confirmed that there was statistically no significant difference between the mean scores of the two groups as the p-value is greater than 0.05 level of significance. This implies that the respondents similarly viewed activities of school leadership and level of the performance differed from school to school and/or zone to zone in the study area. However, level of the performance was faire and could energize the staffs perform their respective duties towards school improvement.

3.2. Practices Transactional School Leadership Style

Respondents were requested to depict level of their agreement about the imple-

mentation of this leadership style for the sake of overall school improvement. As a result, their views are presented in **Table 5**.

As can be seen from **Table 5(a)**, mean scores of principals ($M = 3.73$; $SD = 1.09$) and teachers ($M = 3.51$; $SD = 1.14$) revealed that the principals practiced different activities related to motivation. This result indicated that the overall performance level was above average but cannot bring about the desired progress of schools levels and students' learning outcomes, mainly the academic ones as the principals did not accomplish the tasks to a full extent. Furthermore, a t-test result was run to determine if a significant difference evident between levels of agreement of the two groups. The test, $t(325.6) = 2.08$, $P = 0.184$) demonstrated that there was statistically no significant difference between the mean scores of respondents of the groups since the p-value is greater than 0.05 level of statistical significance. As this result, respondents similarly viewed implementation of the components of the school leadership.

As shown in **Table 5(b)**, mean scores of principals ($M = 3.45$; $SD = 1.06$) and teachers ($M = 3.23$; $SD = 1.13$) indicated that principals provided rewards for the teachers who best achieved goals of teaching practices. In this analysis, the principals' rating was higher than that of the teachers. Moreover, the computed independent samples t-test result, $t(321.5) = 2.55$, $P = 0.011$) depicted that there was statistically significant means difference between the scores rated by the two groups implying that views of the respondents on provision of the rewards to the teachers were not the same. Overall, the performance of reward provision was above the middle point but could not adequately encourage the teachers to exert their full potentials in order to promote students learning outcomes.

As indicated in **Table 5(c)**, mean scores of principals ($M = 3.78$; $SD = 1.07$) and teachers ($M = 3.48$; $SD = 1.19$) showed that the principals informed the teachers about standards that they should have as professionals and they were also conscious of inevitable school problems with possible solutions. These results depicted that principals' rating score was greater than those of the teachers implying that exaggeration of performance on part of the former respondents was observed when viewed in light of a real status of the targeted schools. Here the principals accomplished the tasks above average; again they are expected to perform their responsibilities up to the maximum extent so as to bring about

Table 5. Implementation of transactional leadership style and results of statistical analyses.

Components of transactional leadership	Mean		Std. Deviation		Indep. samples t-test		
	Principals (N = 157)	Teachers (N = 312)	Principals (N = 157)	Teachers (N = 312)	Df	t-value	p-value
a. Contingent reward	3.73	3.51	1.09	1.14	325.6	2.11	0.184
b. Provision of the rewards	3.5	3.15	1.38	1.42	321.5	2.55	0.011
c. Man't-by-exception active	3.78	3.48	1.07	1.19	344.1	2.7	0.01
d. Passive avoidant factors	2.78	3.0	2.11	2.11	300.2	-1.43	0.318

the desired changes in overall school improvement.

Moreover, the computed t-test result, $t(344.1) = 2.7, P = 0.01$ confirmed that there was statistically significant difference between the mean values of the respondents. This result indicated that the activities performed by the principals were found at a good level but still extra efforts are needed for the best achievement of the school goals. From this finding it can be inferred that provision of rewards for more motivation of staffs was not sufficient and uniform among the sample zones and secondary schools. Thus, it was not performed as outlined by Ethiopian Ministry of Education that secondary schools principals consistently provide both formal and informal recognition to staff and students for achievement, improvement and effort (MoE, 2015). However, in comparison, practice of reward provision in Ethiopia was better than that of the South Africa where only 22% of the principals usually reward committed educators for their efforts (Shuti, 2019).

As indicated in **Table 5(d)**, mean scores of principals ($M = 2.78; SD = 2.11$) and teachers ($M = 3.0; SD = 2.11$) practiced elements of management-by-exception passive and laissez-faire with a great mean difference as evidenced by standard deviations. However, the calculated t-test result, $t(300.2) = -1.96, P = 0.369$ showed that there was statistically no significant means difference between mean scores of respondents of the two groups, because the p-value is greater than 0.05 level of significance. Overall average mean score of the respondents ($M = 2.89$) above the middle point (2.5) implying that nearly half of the principals exhibited passive (management-by-exception) and laissez-faire characteristics and they were not effective leaders because they did not make attempt to influence followers (school staffs) and even did not provide pertinent professional supports for employees.

Finally, inspection reports were gathered in order to analyze effectiveness of leadership styles practiced in improvement of the schools' levels. Accordingly, the aggregate data are depicted in **Table 6**.

Table 6. Level of the sample secondary schools.

№	Name of the zone	Level and number of school in 2017			Level and number of school in 2018			Level and number of school in 2019		
		1	2	3	1	2	3	1	2	3
1	East Wollega	-	10	7	-	10	7	-	10	7
2	Bale	-	15	-	-	15	-	-	15	-
3	East Hararghe	1	15	-	1	15	-	1	15	-
4	North Shewa	-	9	2	-	9	2	-	9	2
5	Arsi	-	11	-	-	11	-	-	11	-
6	Iluababor	-	11	-	-	11	-	-	11	-
	Percent	1.3	85	13.8	1.3	85	13.8	1.3	85	13.8

Source: Education offices of the sample zones, 2020.

As shown in **Table 6**, 68 (85%) of the sampled secondary schools were found at level 2 within the three consecutive years (2017-2019). This implies that these schools did not yet meet their required standards (level 3 and 4) and so they need improvement in terms of inputs, process and outputs. On the other hand, only 11 (13.8%) of these schools were found at the required standards (level 3). Unfortunately, 1 (1.3%) of these schools stood at level 1 that can be closed or removed from education service giving system as its current level that was found under standard as stated in principle of national school inspection (MoE, 2013).

This finding agrees with statement of numerous researchers, for instance, **Joram et al. (2020)** and **OECD (2017a)** that thinking about how schools have remained largely the same over many generations of students, one could argue that teachers and schools have stagnated, resolved to continue doing what they have always done. Therefore, result revealed that levels of the schools have not been improved to the expected level (level 3 and 4), notwithstanding the principals practiced the most appropriate leadership styles mainly transformational leadership to some more extent. However, result implies that the principals did not effectively implement these school leadership approaches. This finding is coincided with a national evaluation report stating that the progress was underway but that standards generally remained below the expected levels (MoE, 2015: p. 21).

Typical mirror image of improvement of school level is progress of students' academic achievement which is indicated in **Table 7**.

Table 7 indicates that overall average results of students' academic achievements showed tendency of decreasing with fluctuating instead of becoming improved over time within the three consecutive years. This implies that school improvement, which is mainly measured by academic result, was not yet reached a required level. This finding was consistent with the report of national strategic plan document which states that student achievement has not sufficiently improved; despite significant investment in quality of inputs, the national learning assessments show deteriorating trends in student achievement (MoE, 2015: p. 20).

Table 7. Percent of average results of students' academic achievement by zone.

№	Name of zone	Average results of 2017		Average results of 2018		Average results of 2019	
		English	Mathematics	English	Mathematics	English	Mathematics
1	E/Wollega	82.0	75.9	89.5	71.9	95.1	72.36
2	Bale	82.6	82.8	78.3	72.9	79.4	76.9
3	E/Hararghe	74.5	72.2	78.2	66.7	72.6	63.1
4	N/Shewa	87.4	69.5	88.5	83.6	92.6	74.8
5	Arsi	75.8	73.6	83.9	80.5	79.9	76.2
6	Iluababor	82.1	62.0	76.0	60.3	74.8	68.7
	Total average	78.3	75.1	76.3	78.8	76.6	77.8

Source: Education offices of the sample zones, 2020.

Table 8. Results of correlation coefficients between schools' levels and academic achievements.

Year	English	Mathematics
2017	-0.282	-0.138
2018	-0.130	0.020
2019	0.091	-0.009

*Correlation (2 tailed) is statistically significant at 0.05 level.

Therefore, the finding revealed that the schools' levels could not serve as pre-conditions for continuous improvement of the students' academic achievement.

As can be seen from **Table 8**, Pearson correlation coefficient showed that the schools' levels and students' academic achievement was negatively correlated, whereas positive association was found in English in 2019 while mathematics remained without a pattern of correlation in 2018.

4. Conclusion and Recommendations

4.1. Conclusion

This study was devoted to assess whether the practiced leadership styles of the principals realized the desired improvement in levels of the schools and in turn students' academic achievement in the study area. Accordingly, the study found that transformational style of school leadership was the most relatively practiced as compared with instructional and transactional school leadership styles and reference to the norm of classifying dominant leadership styles. However, progresses of levels of secondary schools were very weak because no changes were observed; likewise, continuous improvement in students' academic performance was not observed within the three consecutive years. The study also found that the relationship between the schools' levels and students' academic achievement was statistically significant with negative pattern existed. This implies that the principals' effectiveness in overall school performance was below the expected in the study area.

4.2. Recommendations

The following recommendations are suggested to be practiced primarily by the principals, as they are expected to play central roles in school leadership, other leaders and stakeholders at different levels. The principals need to make extra committed efforts to fill practical gaps observed in school leadership and management activities. School improvement, in terms of level and academic results, needs joined efforts of stakeholders so that their involvement in school affairs will bring about the required changes in the improvement. The *woreda* education offices should also assign all rounded competent principals on the basis of merit and open competition and then work on capacity building through education and trainings.

A future research should incorporate assessing effectiveness of the other school leaders, mainly of secondary school supervisors and *woreda* education offices heads. It should also employ large sample size of secondary schools in Oromia and the rest regions of Ethiopia with respect to principals' school leadership effectiveness. In line with this, more longitudinal analyses of academic achievement of the two compulsory and other subjects should be conducted with aim of obtaining more valuable information on its progress in relation to improvement of the schools' levels. If so, the result of the future study will be generalized to Ethiopian government secondary schools.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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