Influence of Job Group on Teachers’ Self-Efficacy in Secondary Schools

Sylvester J. O. Odanga¹*, Pamela A. Raburu² and Peter J. O. Aloka²

¹Kasagam Secondary School, P.O.Box 2071 – 40100, Kisumu, Kenya.
²Jaramogi Oginga Odinga University of Science and Technology, P.O.Box 210-40601, Bondo, Kenya.

Authors’ contributions

This work was carried out in collaboration between all authors. Author SJOO designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/ARJASS/2018/38485

Editor(s):
(1) Takalani Samuel Mashau, Associate Professor, Department of Educational Management, School of Education, University of Venda, South Africa.

Reviewers:
(1) Stamatis Papadakis, University of Crete, Greece.
(2) Lawrence Jekwu Okoye, University of Maiduguri, Nigeria.

Complete Peer review History: http://www.sciencedomain.org/review-history/23682

Received 9th October 2017
Accepted 18th December 2017
Published 17th March 2018

ABSTRACT

Aim: To investigate the influence of job group on teachers’ self-efficacy in public secondary schools.

Sample: The study population was 1790 teachers in 143 public secondary schools from which a sample of 327 teachers was drawn using stratified random sampling based on Israel's sample size formula.

Study Design: A mixed method approach and a concurrent triangulation design were adopted.

Place and Duration of Study: Teachers in public secondary schools in Kisumu County, Kenya, between June 2016 and September 2016.

Methodology: Interview schedule and questionnaire were used to collect qualitative and quantitative data respectively. Interview schedule and questionnaire were piloted with teachers who did not participate in the study to establish validity and reliability. Qualitative data was transcribed verbatim and analyzed thematically while quantitative data was analyzed using descriptive statistics and inferential statistics, which was MANOVA.

Conclusion: The quantitative findings revealed that teachers’ job group had no significant influence on teachers’ self-efficacy while qualitative data revealed that teachers’ job group had an influence on teachers’ self-efficacy.

*Corresponding author: Email: odangasoj@gmail.com;
Keywords: Self-efficacy; teachers; job group; secondary school; students.

1. INTRODUCTION

1.1 Background of Study

Teacher’s self-efficacy is the personal belief of possessing the ability to perform professional tasks with mastery [1]. The construct of teachers’ self-efficacy, which was derived from [2] Social Cognitive Theory, holds that people only do what they believe they are good at doing.

Teachers’ self-efficacy, therefore, determines teachers’ levels of effectiveness, innovativeness and persistence in their professional work [3,4,5]. Furthermore, [3] and [6] found that teachers with a stronger sense of efficacy had higher job satisfaction, were good in planning and organizing their work, were more open to new ideas, more innovative, more persistent, more resilient and less critical of students than teachers with low self-efficacy were. Consequently, several researchers found out that teachers’ self-efficacy is important because it has a positive relationship with students’ academic performance [7,8,9,10,11].

[12] reiterated that the more efficacious the teachers felt, the more inclined they were to use communicative-based instructional strategies in Iran while [13] found that teachers’ self-efficacy beliefs in classroom management decreased as time went on during teaching practice in Turkey. On the other hand, [14] found that high teachers’ self-efficacy helped students by creating positive teacher–student relationships in Turkey.

[15] on the other hand, found that there were significant differences on classroom management based on the demographic factors in Pakistan. However, there were no significant differences in student engagement and instructional strategy across gender, age, professional qualification and school category. [16] in Tanzania found that classroom variables affected teachers’ self-efficacy on inclusive education. However, the study did not consider the effect of teachers’ job groups on teachers’ self-efficacy.

1.2 Statement of Problem

Teachers’ self-efficacy has not been given adequate analytic attention in Kisumu County, although many studies have established that teachers’ self-efficacy in parts of Kisumu County were found to be low in two educational domains [17,18]. [17] and [18] found that teachers’ had low self-efficacies in special needs and HIV&AIDS education respectively in Kisumu East and Kisumu Municipality. However, the studies by [17] and [18] were content-specific and did not consider the teachers’ self-efficacy in all content areas. Furthermore, the studies were conducted only in certain parts of Kisumu County. In addition, the studies into teachers’ self-efficacy did not investigate the influence of job group on teachers’ self-efficacy. Therefore, there was need for an investigation into the influence of job-group on teachers’ self-efficacy.

1.3 Relevance of the Study

The study was of relevance by providing an indication on how job promotion or stagnation affected teachers in the performance of their duties. Moreover, it also indicated how teachers view those in different job groups – whether those job groups are an indication of teacher performance or not. In addition, the study provided an academic interrogation on influence of teachers’ job groups on their self-beliefs.

2. PURPOSE OF THE STUDY

The purpose of this study was to investigate the influence of job group on teachers’ self-efficacy in secondary schools of Kisumu County, Kenya. The null hypothesis of the study was that there was no significant influence of job groups on teachers’ self-efficacy and the domains of teachers’ self-efficacy, which are, self-efficacy in classroom management, student engagement and instructional strategy.

3. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

3.1 Theoretical Framework

The construct of teachers’ self-efficacy was taken from [2] social cognitive theory, which adopts an agentic perspective where people intentionally influence their functioning through self-directed goal tendency to achieve self-development [19]. According to [2], there is a triadic relationship among environmental factors, behavioral characteristics and personal factors such as teachers’ job group.
Furthermore, [20] argued for the need for a specific measure for teacher self-efficacy because to avoid ambiguity and increase explanatory and predictive value of the measure. Consequently, there was need for the construct of teacher self-efficacy that is measured using a specific instrument for measuring teachers’ self-beliefs in their capability to promote learning outcomes in their students. The current study adopted the Teacher Self-efficacy scale by [21], which identified three domains in the construct of teachers’ self-efficacy. These three domains are teacher self-efficacy in instructional strategies, student engagement and classroom management.

3.2 Literature Review

Job group is the position of a teacher on the hierarchical salary scale that depends on a teacher’s education level, experience and job performance. In Kenya, teachers attain different job groups through promotion by their employer, the Teachers’ Service Commission. Promotion is advancement of an employee from one job position to another that has a higher job title, responsibilities, salary range and requires higher skills and experience [22].

[22] suggested that movement up the job group status could affect teachers’ self-efficacy because it is the major motivational reward tool for teachers who meet standards set by their employer. Previous research had found that individuals with high levels of self-efficacy attained high job groups earlier than those with low levels of self-efficacy did, and this was because of a positive relationship between self-efficacy and job performance [23,24].

In Europe, [23] studied the influence of self-efficacy on career attainments such as higher salary and job group status among graduate professionals in Germany. The study found that self-efficacy measured at career entry had a positive impact on salary and job group status three years later. Hence, individuals with high levels of self-efficacy attained higher job groups significantly earlier than those who did not have high levels of self-efficacy did. However, the study was conducted with members of all professions and not teachers only as in the present study.

Secondary school teachers’ self-efficacy was investigated in Pakistan and revealed a positive relationship with job performance [24]. The study sought to identify the relationship between self-efficacy and their job performance among secondary school teachers. The results of the study revealed a positive relationship between teachers’ self-efficacy and their job performance. However, the study only investigated teachers’ self-efficacy in relation to their job performance, and not influence of job group on teachers’ self-efficacy.

[25] and [26] investigated factors affecting job performance among people in the education sector in Nigeria and South Africa respectively. Both studies were descriptive survey in design and collected data using questionnaires. The findings of [26] revealed that there were no significant differences in job control among teachers of different job groups. On the other hand, [25] found that there was significant relationship between job group status and job performance. However, the studies were generally on education workers and not specifically teachers.

A study conducted by [27] investigated the building of effective teacher salary systems based on job groups. The study was a qualitative study where data was collected through interview schedules. Data analysis revealed that teacher pay, determined by job group status, influences teacher satisfaction and morale. Nevertheless, the study investigated teachers’ salary systems, which although is a sub-set of job group, left out some other aspects of job group such as professional prestige.

A study commissioned by Tanzania Teachers’ Union (TTU) and conducted by [28] studied the influence of teachers’ working conditions on teachers. The study used mixed methods approach and collected data using questionnaires, interview schedules and observation schedules. Findings revealed that the working conditions affected teachers’ self-concept such that poor living conditions led to the teachers’ lack of pride in their profession and work. However, the study investigated only the influence of salary as an indicator of job group status of teachers and not influence of job group status on teachers’ self-efficacy.

A study in Kenya by [29] investigated impact of students’ performance in national examinations on teachers’ job groups in Nyandarua County. Data was collected using a questionnaire from a sample of teachers selected using multi-stage
investigated the influence of job group status on qualifications. Nevertheless, the study only management than did t qualifications were slightly better in classroom USA. The results showed teachers with lower student achievement in a longitudinal study in the

3.2.1 Influence of teachers’ job group on their self-efficacy in classroom management

[31] examined whether teacher qualifications, which determine job groups, affect middle school student achievement in a longitudinal study in the USA. The results showed teachers with lower qualifications were slightly better in classroom management than did teachers with higher qualifications. Nevertheless, the study only investigated the influence of job group status on students and not influence of job group status on teachers' self-efficacy.

In addition, [32] conducted a qualitative case study on how teachers in Georgia, USA, perceive the impact of low self-efficacy on their classroom management style. Data were collected using a survey, interviews, questionnaires, direct observations, and a focus group. Thematic data analysis revealed that four themes emerged from the data analysis process: build relationships, be flexible, convey expectations, and make a difference. However, the study was a purely qualitative one which lacked statistical rigor provided by quantitative approaches. The present study filled this gap by using a mixed methods approach.

[33], in contrast to [31] which used teacher qualifications to investigate teachers' job group status, used professional status based on employment in different types if schools in the USA. [33] investigated whether teachers of higher professional status were more effective in classroom management than teachers of lower professional status had. The study used tests to collect data from teachers in US schools. The findings revealed that teachers of higher professional qualifications were less effective than teachers of lower professional qualifications were. However, [33] tested the influence of professional status on content and pedagogical skills rather than teachers' self-efficacy as in the current study.

[34], consequently, investigated the importance of socio-economic status in determining educational achievement in South Africa. The study was based on the framework that higher educational qualifications correlate with higher earnings from higher status jobs. The study found that there is circularity in the relationship between socio-economic status (SES) and education. However, the reviewed study was carried out and used students and not teachers, as was the present study.

Managing classrooms was the thrust of the study by [35] on teaching large classes in 20 government primary schools in Uganda. The study employed the mixed methods approach; data was collected using interview schedules, observation schedule and document analysis guides from teachers and school administrators. Data analysis using content analysis and descriptive statistics findings indicated that teaching large classes was challenging to
teachers in classroom management. However, the study investigated influence of class sizes on Ugandan primary school teachers’ classroom management and not influence of job group on teachers’ self-efficacy in Kenyan secondary schools.

Classroom management might include features that are components of quality teaching. Hence, [36] examined the contribution of quality mathematics teaching to student achievement gains in six districts of Kenya. The sample comprised of 72 primary schools selected at random. Data was collected using tests, video-recording and observation schedules. Data analysis using multi-level regression revealed that students gained more by 6% when mathematics was taught using higher quality teaching. However, the study investigated the influence of quality teaching on students’ mathematics achievement and not the influence of job group status on teachers’ self-efficacy in classroom management in Kisumu County.

3.2.2 Influence of teachers’ job group on the self-efficacy in instructional strategies

In addition, the current study investigated influence of teachers’ job groups on teachers’ self-efficacy in instructional strategies. [37] investigated the self-reported instructional strategies of college mathematics professors in the US. The sample was obtained through an electronic survey and data was collected using a modified program of Approaches to Teaching Inventory-Revised (ATI-R). Data analysis using factor analysis indicated that lectures, practice problems and tests are common instructional features. On the other hand, [37] only investigated teachers’ preferential methods of instruction and not influence of job group status on teachers’ self-efficacy in instructional strategies.

[38] examined the prospective teachers’ self-efficacy beliefs about using Teachers’ Sense of Efficacy Scale (TSES) in Turkey. There was no significant mean difference between freshman and senior prospective teachers with respect to their efficacy beliefs in instructional strategies. However, although the respondents were at different levels in professional development, the study was conducted with college students and not practicing teachers of different job groups, which would increase the difference between teachers of different ranks.

[39] investigated the influence of training kindergarten teachers on students’ achievement in Math in Jordan. Data was collected using tests on Mathematics from a sample of 178 participants in an experimental design. The experimental group was trained in appropriate instructional strategies while the control group was not. Data analysis indicated that there were statistically significant differences in the performance between students taught by trained and untrained teachers. Therefore, it could be concluded that different instructional strategies had different influence on student performance. However, the study only considered the influence of job group status on teachers and not the influence of job group status on teachers’ self-efficacy in instructional strategies.

The performance of teachers engaged in teaching was affected by undergoing a training module that changed the status of teachers in Jordan [40]. The study investigated the influence of a training program in improving instructional competencies for Special Education teachers. Data was collected from a sample of 50 teachers in an experimental design in a mixed methods approach. The teachers in the experimental group were of a different status to the ones in the control group because they were exposed to a special training program module. Both the results of quantitative and qualitative data analysis revealed that there were significant differences between the two groups’ performance, in favor of the experimental group in instructional strategies. However, the study investigated special education teachers and not regular secondary school teachers.

3.2.3 Influence of teachers’ job group on self-efficacy in student engagement

Teachers’ self-efficacy in student engagement has received little analytic attention has in relation to job group status. According to [41], there has been a development in the study of student engagement from a reactive stance to a proactive stance. The study reviewed research on student engagement to discover ideas educators use for better student engagement in learning. The study found out that work in student engagement has grown from focusing upon disengaged students to engaged learners. However, this secondary research only pointed out the direction of research and not a primary study that sought to establish influence of job group status on teachers’ self-efficacy in student engagement.
A primary research by [42] explored the quality of engagement in elementary school students in the USA. The study collected data using direct observation, teacher notes, rubrics, student surveys and student projects; and analyzed the data qualitatively. Results showed that by providing students with choices in their learning, they are more engaged in the narrative process. However, the study used only qualitative methods to collect data from students and it lacked quantitative data. Hence, the current study filled the gap in literature by using mixed methods approach.

[43], consequently, used mixed methods design with teachers in USA Early College High Schools to investigate how the teachers influenced student engagement. Both qualitative and quantitative data was collected using personal interviews, classroom observations, writing prompts, document analysis and questionnaires. The data was analyzed both qualitatively and quantitatively to yield results that indicated that high school teachers and community college instructors had different levels of student engagement. Therefore, it could be surmised that teachers of different status had different levels of student engagement. However, the study investigated student engagement from a student’s perspective and not the teacher’s perspective.

[38] examined the prospective teachers’ self-efficacy beliefs about teaching using Teachers’ Sense of Efficacy Scale (TSES). There was no significant mean difference between freshman and senior prospective teachers with respect to their efficacy beliefs in student engagement. However, the study was a purely quantitative study conducted with prospective teachers. The present study filled the gap in literature by drawing respondents from practicing teachers and employing the mixed methods approach that combined statistical rigor with in-depth probing of responses.

A study by [44] investigated the impact of achievement motivation on students’ academic engagement in Nigeria. Data was collected using questionnaire administered to 540 senior secondary students’ data. Data analysis revealed that achievement motivation has a significant impact on academic engagement with highly motivated students being more academically engaged than the moderately and lowly motivated students are. Therefore, the study investigated the influence of teachers’ motivation and not influence of teachers’ job group on self-efficacy.

The role of teachers in student engagement was dealt with obliquely in a study into instructional time [45]. The study investigated the extent to which teacher-instructional time, student-engaged time and student numerical ability can predict achievement in Chemistry in an ex post-facto descriptive survey design in Nigeria. Data analysis using a stepwise multiple regression analysis showed that teacher instructional time, student-engaged time and numerical ability when taken together accounted for 63.9% of the total variance among the students. However, the study used students to determine teacher instructional time and not teachers’ self-efficacy in student engagement.

The teachers’ perspective was captured in a study conducted in Tanzania on teachers’ perceptions of their teaching practices in classroom contexts and gender gaps [46]. Data was collected using semi-structured interviews and classroom observations. The study identified the quality of teaching among the factors that influence students’ level of achievement. However, although the study investigated teaching practices in classroom contexts, it did not consider teachers’ self-efficacy in student engagement. Therefore, there remained a need for an investigation into the influence of teachers’ job group status on teachers’ self-efficacy in student engagement.

4. MATERIALS AND METHODS

4.1 Research Design

The current study employed a mixed methods approach through concurrent triangulation design, which involves using qualitative and quantitative methods in tandem to study the same phenomena [47]. Concurrent triangulation design combined quantitative and qualitative methods through use of questionnaire and interview respectively in data collection on teachers’ self-efficacy [48,49]. This was beneficial for the study because triangulation ensured that the limitations of individual approaches were offset by the strengths of another approach [50].

4.2 Study Participants

The population of teachers in national schools was 101 of which 20 were sampled while the
population of teachers in County schools was 515 of which 95 were sampled. The population of teachers in Sub-County schools was 1174 of which 212 were sampled. Therefore, the population of 1790 teachers was represented by the sample of 327 teachers adequately.

### 4.3 Demographic Information

The job groups for teachers according to the [51] are job groups J, K, L, M, N, P, Q and R conditions. However, in the current study, there were cases for job groups J (n = 3; 1%), K (n = 88; 27%), L (n = 119; 36%), M (n = 79; 24%) and N (n = 38; 12%) while there were zero cases for job groups P, Q and R. These proportions yielded shown graphically in Fig. 1.

Fig. 1 shows that most of the respondents for the questionnaire were in Job Group L followed by Job Groups K and M. Job group J had the fewest teachers followed by Job Group N. Other job groups such as P, Q and R which are present in the TSC had no teachers among the respondents.

### 4.4 Research Instruments

The instruments for collecting quantitative data were questionnaire while qualitative data was collected using interview schedule. The questionnaire adopted the longer form of the Teacher Self-Efficacy Scale (TSES) developed by [21] to measure teachers’ self-efficacy and its sub-constructs. The TSES consisted of 24 items on a summated scale with eight items measuring each of the three sub-constructs. The sub-constructs were student engagement, efficacy in instructional strategies and efficacy in classroom management. Teacher Self-Efficacy was computed as the sum of the scores on the sub-constructs from the subscales. The internal reliability of the Teachers’ Self-Efficacy Scale use in the present study was computed using Cronbach’s internal reliability coefficient, alpha, and found to be $\alpha = 0.97$.

The current study used semi-structured interview schedule for collecting qualitative data because of the focus and freedom it accords the researcher in data collection, gives rich data and captures inner feelings of respondents [52,53,54]. The semi-structured interview schedule captured the three constructs within the teachers’ self-efficacy.

### 4.5 Data Collection Procedures

The current study used two samples composed of different respondents for the quantitative and qualitative approaches in its mixed methods approach. The quantitative sample was determined using stratified random sampling technique while the qualitative sample was determined using strategic sampling technique.

Stratified random sampling was performed by dividing the teacher population in Kisumu County into non-overlapping strata [55,56]. The strata used in this study were gender and school category. The qualitative sample for the present study was selected through strategic sampling, because according to [57], it is better than probabilistic sampling in qualitative research.

The researcher personally visited the schools, met the principals, and informed them of the nature and purpose of the research. Dates for data collection were then set. Finally, on the dates agreed, the researcher visited the concerned schools to collect data from the sampled teachers. The participants were debriefed before administration of the questionnaires or interview schedules. The qualitative sample size comprised of 12 interviewees. The respondents were given the consent form to fill before the questionnaire was administered. The quantitative data was collected through self-report questionnaire. Each questionnaire took between 10 – 20 minutes to administer. The filled questionnaires were screened and then filed.

Qualitative data was collected from 12 respondents through interview schedule and the interviews were audio-recorded using a digital voice recorder. This number of interviewees fell between 6 and 20 that was the recommended sample size for a phenomenological study, as recommended by [57] and [58]. The researcher conducted the interviews, each of which lasted between 25 – 60 minutes.

### 4.6 Data Analysis

The data was analyzed both quantitatively and qualitatively using statistical procedures and thematic analysis respectively. Quantitative data was analysis for inferential and descriptive statistics used both Statistical Package for Social Sciences (SPSS) and Microsoft
Excel. The hypotheses were tested at the 95% level of confidence using Multivariate Analysis of Variance (MANOVA), specifically Wilk’s \( \lambda \).

Qualitative data was analyzed using thematic analysis, which is a method for identifying, analyzing and reporting patterns, called themes, within data by organizing and describing the data set in rich detail [59]. Interviews from the interviewees were tape-recorded, transcribed, interpreted, themes and sub-themes emerged and coded as in [53]. Thematic analysis was performed using the five phases of [59], which were, verbatim transcription, initial coding, searching for themes, reviewing themes, defining and naming the themes.

5. RESULTS AND DISCUSSION

5.1 Quantitative Data Analysis Findings

The response rate for the questionnaire was 94.7% and for the interview schedule was 100%. The totals for the descriptive statistics for the domains of teachers’ self-efficacy were student engagement (M = 33.70; SD = 2.880), classroom management (M = 33.91; SD = 3.263) and instructional strategies (M = 34.21; SD = 2.988). These differences were tested for significance using MANOVA test as is captured in Table 1.

The results in Table 1 results of MANOVA that demonstrate that the influence of job groups on teachers’ self-efficacy was not significant, Wilk’s \( \lambda \) (4, 322) = 0.970, \( p = 0.638 \). Therefore, there is no significant difference in self-efficacy of teachers across different job groups. This finding was similar to [26] which found that there was no significant influence of job groups on teachers’ self-efficacy. However, the current findings are contrary to [22,23,24,25,28] that had found that there was significant relationship between job group status and job performance. Consequently, the present study made the contribution that quantitative data analysis results indicate that the influence of teachers’ job groups on their self-efficacy was not significant.

Univariate tests were performed to determine between-subjects influence of job group status on the domains of teachers’ self-efficacy, which were, self-efficacy in student engagement, instructional strategies and classroom management. The results of the univariate tests are captured in Table 2.

The information presented in Table 2 shows the degrees of freedom, F-score and significance levels for the tests of between-subjects influence of job group on the domains of teachers’ self-efficacy. Furthermore, the results show that the influence of job group on teachers’ self-efficacy in student engagement, instructional strategy, classroom management was significant. Consequently, the contribution of the current study to new knowledge was that quantitative data analysis results found that the influence of teachers’ job group on the domains of teachers’ self-efficacy was not statistically significant.

5.2 Qualitative Data Analysis Findings

Qualitatively, some teacher respondents reported that increase in job group status increases the level of teacher self-efficacy. The reason the teachers gave was that higher job groups gave the teachers professional pride, increased salaries and peer recognition. A teacher respondent said that, “The teachers feel better as they get the higher job groups. The salary increment makes the other teachers feel you are better.” Consequently, teacher respondents said that stagnating in a job group led to reduction of teacher self-efficacy as a teacher said, “The stamina to teach decreases when someone stagnates in a job group.” Another teacher added that, “Lack of job group progression demoralizes those who don’t get it and those who are looking for them.”

The finding of the current study that job group influences teachers’ self-efficacy was similar to [22,23,24,25,28] that had all found that there was significant relationship between job group status and job performance. However, it was contrary to [26], which found that there was no significant influence of job group on teachers’ self-efficacies.
Table 1. MANOVA tests for effect of job groups on teachers’ self-efficacy

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig</th>
<th>Partial eta squared</th>
<th>Noncent. parameter</th>
<th>Observed power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai’s Trace</td>
<td>.030</td>
<td>.812</td>
<td>12.000</td>
<td>966.000</td>
<td>.639</td>
<td>.010</td>
<td>9.741</td>
<td>.486</td>
</tr>
<tr>
<td>Wilk’s λ</td>
<td>.970</td>
<td>.812</td>
<td>12.000</td>
<td>846.932</td>
<td>.638</td>
<td>.010</td>
<td>8.586</td>
<td>.427</td>
</tr>
<tr>
<td>Hotelling’s Trace</td>
<td>.031</td>
<td>.812</td>
<td>12.000</td>
<td>956.000</td>
<td>.638</td>
<td>.010</td>
<td>9.743</td>
<td>.487</td>
</tr>
<tr>
<td>Roy’s Largest Root</td>
<td>.025</td>
<td>2.005</td>
<td>4.000</td>
<td>322.000</td>
<td>.094</td>
<td>.024</td>
<td>8.018</td>
<td>.599</td>
</tr>
</tbody>
</table>

Computed using alpha = 0.05

Fig. 1. Proportions of teachers in each job group
Some teachers, however, reported that job group status has no influence on teachers’ self-efficacy. For example, a teacher respondent said, “Those job groups don’t change a teacher. The teachers remain the same since the job group does not change their teaching.” This finding was similar to [26], which reported that there was no significant influence of job group on teachers’ self-efficacy. However, it was contrary to [22,23,24,25,28] that had found that job group influenced teachers’ self-efficacy.

In addition, the respondents felt that higher job groups improved teachers’ self-efficacy in classroom management. A teacher respondent said, “When the teacher does not progress in job group, the teacher's classroom delivery is affected drastically.” However, on teachers’ self-efficacy in student engagement and instructional strategies, teacher respondents reported that, “I should expect teachers of higher job groups to have better instructional strategies but that is not the case.”

In addition, another teacher said, “They may feel they are too high for classroom teaching and they now need responsibility as deputy or principal.” This finding was contrary to [36,40,43] that had reported significant influence of job group on teachers’ self-efficacy in instructional strategies and student engagement. The present finding was also contrary to [31,33], which had reported that the influence of job group on teachers’ self-efficacy in classroom management was significant.

The qualitative aspect of the present study, therefore, found out that while most teachers reported that increase in job groups increases teachers’ self-efficacy, a few disagreed and reported that climbing higher ranks of job group had no effect on teachers’ self-efficacy. Concerning the domains of teachers’ self-efficacy, the contribution of the present study is that teachers in higher job groups tended to be self-efficacious in classroom management and student engagement but less self-efficacious in instructional strategies than the ones in the lower job groups.

### Table 2. Between-subjects effects of job group on teachers’ self-efficacy

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent variable</th>
<th>df</th>
<th>F</th>
<th>Sig</th>
<th>Observed power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Group</td>
<td>Teachers’ Self-Efficacy in Student Engagement</td>
<td>4</td>
<td>1.942</td>
<td>.103</td>
<td>.583</td>
</tr>
<tr>
<td></td>
<td>Teachers’ Self-Efficacy in Instructional Strategy</td>
<td>4</td>
<td>.415</td>
<td>.798</td>
<td>.146</td>
</tr>
<tr>
<td></td>
<td>Teachers’ Self-Efficacy in Classroom Management</td>
<td>4</td>
<td>.164</td>
<td>.956</td>
<td>.085</td>
</tr>
</tbody>
</table>

*Computed using alpha = 0.05*

6. CONCLUSION

While the quantitative analyses indicated that job group status had no significant influence on teachers’ self-efficacy, the qualitative analyses showed that job group status had an influence on teachers’ self-efficacy. Furthermore, the teachers reported that stagnating in a job group leads to reduction of teacher self-efficacy because the teacher becomes de-motivated.

Furthermore, qualitative analysis revealed that job groups had no influence on teachers’ self-efficacy in student engagement. In addition, job group had a negative influence on teachers’ self-efficacy in instructional strategies. The reason given for this was that increase in job group comes with increase in age and hence decrease in personal vigor required for effective instructional strategies. However, teachers felt that self-efficacy in classroom management increased with increase in job groups. The reason for this was increased professional pride, self-esteem and self-confidence that came with being in a higher job group.

Therefore, the study recommends that the Teachers Service Commission of Kenya should develop a clear promotion system that is predictable and transparent to avoid teachers stagnating in one job group for reasons that the teacher cannot fathom. This might reduce the negative influence of stagnating in job groups on teachers’ self-efficacy.

**ETHICAL APPROVAL**

All authors declare that written informed consent from the participants and research permit was obtained from the National Commission for Science, Technology and Innovation of Kenya (NACOSTI) for conducting this study.

**COMPETING INTERESTS**

Authors have declared that no competing interests exist.
REFERENCES


26. Wafula AN. Work-family conflict among women from a collectivistic culture. Department of Industrial Psychology, University of the Western Cape; 2010.


© 2018 Odanga et al.: This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here: http://www.sciencedomain.org/review-history/23682