Teachers' Qualifications, School Facilities and Sociocultural Factors as Correlate to Pupils' Competence in 3Rs in Selected Primary Schools in Longido District, Tanzania

Valentine Mathias Tarimo¹, Isaiah Peter Shemsika²

¹(Kisimiri Secondary School P.O.BOX 14480 Arusha, Tanzania) ²(School Quality Assurance Office P.O.BOX 61 Longido, Arusha, Tanzania)

Abstract:

Some researches have been done on the variables which correlate pupils' competence in the 3Rs. The objective of this paper is to provide empirical evidence to whether i) teacher's qualifications, ii) school facilities and iii) socio-cultural factors correlate to pupils' competence in 3Rs in selected primary schools in Longido District. To achieve these objectives of the present study, the quantitative correlation cross-sectional survey design was used. A sample size of one hundred thirty six teachers was randomly selected from ten primary schools in Longido District. Data were collected from the respondents using Self-Administered Questionnaires (SAQs). The collected data were analyzed by Statistical Package for Social Scientists (SPSS) using simple percent one way analysis. Karl Pearson's Linear Correlation Coefficient (PLCC) test was conducted for bivariate analysis and Multiple Regression Analysis for multivariate analysis to assess the relationship between teacher's qualifications, school facilities, socio-cultural factors and pupils' competence in 3Rs in selected primary schools in Longido District. The analysed data revealed that the research hypothesis H_1 and H_3 were not supported by the study findings. Further, the study findings confirmed H₂ that school facilities were significantly positively correlate with pupils' competence in 3Rs in selected primary schools in Longido District. Researchers concluded that school facilities are an index for pupils' competence in the 3Rs. Therefore, the study recommends that the government authorities in Longido District, school administrators, teachers and other education stakeholders should put in place all necessary facilities which contribute to the enhancement of the pupils' competence in the 3Rs.

Key Word: School Facilities, Teachers Qualification, Socio-cultural, 3Rs, Competence, Longido

Date of Submission: 26-08-2022 Date of Acceptance: 10-09-2022

I. Introduction

Education is the basic tool for human development, in particular the basic education. It enables people to meet life's situation, character building process, enhancing one's personality and making him/her rational, capable, responsive, and intelligent [1]. After independence, African countries struggled to improve the inherited colonial education systems. Many countries took different approaches to increase access and growth of education. For example, the Tanzania government ensured access to education for children is a central government policy since independence. Currently, the government of Tanzania is implementing the Education and Training Policy (ETP) of 2014 in which it is committed to the provision of "Fee Free Basic Education". Fee Free Basic Education has led to the massive enrollment of students in Tanzania primary schools. For example, the primary education gross enrollment rate has almost become universal (96.9%) with net enrollment at 84%, and more than 70% of the primary school leavers transit to secondary education[2]. Within these marvelous achievements in expanding access to education at various levels, several challenges limit the development of education in Tanzania. The main challenge is the poor learning outcomes as reflected by poor pass rates in the national examinations in basic education, poor literacy and numeracy skills[3]. There is lamenting voices from education stakeholders on the ability of primary pupils to major the basic skills such as reading, writing and arithmetic's. However, mastering of the Reading, Writing and Arithmetic (3Rs) is a common problem in many primary schools all over the world and in Tanzania, notwithstanding, where some students pass through primary education and still fail to read, write and do simple arithmetic's. Pupils' competence in 3Rs in primary schools is in serious crisis. Analysis of the 3Rs reports from primary schools and the Primary School Leaving Examination results in the Arusha Region from 2014 to 2018 shows that some pupils complete their primary education without mastering the 3Rs [4]. According to [5] in South Asia and Africa majority of students spend

years of instruction with no progress on basics that is literacy and numeracy. The 3Rs are essential for every child learning development [6]. Beyond doubts, competence in 3Rs is important for the success and development of any student as it ensures having future education advancement or a career which contributes to the social and economic advancement of an individual and society.

Some several past, researchers had had interest in pupils' competence in 3Rs in primary schools all over the world. For instance [6] assessed the factor that influence mastery of 3Rs among learners of primary schools in the Ilala District in Tanzania, while [7]study on exploring literacy and numeracy, teaching in Tanzania classrooms; insights from teachers' classroom practices. [8] Studied elementary competence in 3Rs among upper primary pupils in Kerala. [9] studied the influence of instructional media use in pupils' mastery of reading and writing in Kiswahili language in Kinondoni District in Tanzania, whereas [10] conducted a survey of the approaches used in teaching reading in early childhood classes in Dagoretti and Westlands divisions, Nairobi County in Kenya. The issue of pupils' competence in primary school level has not been widely documented. Variables like teachers' qualifications, school facilities and socio-cultural factors are presumed to have influence on pupils' competence in 3Rs in primary schools. However, none of these studies were specifically for the primary schools in Longido District context, and none directly attempted to relate pupils' competence in 3Rs to teachers' qualifications, school facilities and socio-cultural factors. Therefore, this particular study was carried out as an attempt to address these gaps of knowledge.

Objectives of the Study

Specifically, this study was guided by the following objectives;

- i. To establish the relationship between teachers' qualification and pupils' competence in 3Rs in selected primary schools in Longido District
- ii. To establish the relationship between school facilities and pupils' competence in 3Rs in selected primary schools in Longido District
- iii. To establish the relationship between socio-cultural factors and pupils' competence in 3Rs in selected primary schools in Longido District

1.1 Research Questions

This study sought to answer the following questions:

- i. How does teachers' qualification relate to pupils' competence in 3Rs in selected primary schools in Longido District?
- ii. How do school facilities relate to pupils' competence in 3Rs in selected primary schools in Longido District?
- iii. How does socio-cultural factors relate to pupils' competence in 3Rs in selected primary schools in Longido District?

1.2 Research Hypothesis

The following hypotheses were formulated and tested at 0.05 acceptance level of significance:

- i. Teachers' qualification is positively correlated with pupils' competence in 3Rs in selected primary schools in Longido District
- ii. School facilities are positively correlated with pupils' competence in 3Rs in selected primary schools in Longido District
- iii. Socio-cultural factors are positively correlated with pupils' competence in 3Rs in selected primary schools in Longido District

1.2 Related Literature

1.2.1 Teachers' qualification and pupils' competence in the 3Rs. According to [11] teacher's qualification refers the qualifications of the teacher as a reflection of competence (e.g. degree, quality of college, exam scores, certification, subject-matter credential, experience), the personal or psychological qualities of a teacher (such as love of children, honesty, compassion, fairness), the pedagogical standards that a teacher exhibits (use of certain teaching strategies, classroom management skills, establishment of a positive classroom climate), or the teacher's demonstrated ability to raise student learning (successful or effective teaching).[12] defined teacher qualification as one of a numbers of academic and professional degrees that enables a person to become a registered teacher in primary or secondary school. Such qualifications include, but are not limited to, the Postgraduate Certificate in Education (PGDE), diploma in education. Teachers' qualifications are credentials, knowledge, and experience that teachers poses. Teachers' qualifications, therefore, might not only be the certificate someone is holding as erroneously conceived by some people. Teachers' qualifications are more than just holding a certificate of any institution[13] Teachers' qualifications could, therefore, mean all the skills a teacher is required to teach effectively. Such skills include formal education, experience, subject matter

knowledge, pedagogy studies, duration of training, certificate/licensing and professional development [14]. In this particular study, however, teachers' qualifications mean the knowledge of the subject matter that a teacher poses and ability to deliver it to the pupils which brings competence in reading, writing and arithmetic to the acceptable level. Teachers are therefore, essential players in any education system. Good education system depends mainly on the qualifications of its teachers. There is no education system which is superior to its teachers.

Several authors' theories on the relationship between teachers' qualifications and pupils' competence in the 3Rs. Example [15] in their study of exploring literacy and numeracy, teaching in Tanzania classrooms; insights from teachers' classroom practices found that there were serious problems of literacy teaching in public primary schools where most of the teachers do not have adequate skills of teaching. About 64% of standard two pupils cannot read, write and do simple numeracy while for standard three it is about 54% cannot do that. Similarly, [16] in his study on teacher qualification and the achievement gap in early primary grades found that students with a certified teacher for most of their early school experience scored higher in reading than students who did not have a certified teacher. [17] study on the attributes of effective rural teachers, teacher attributes and Mathematics achievement among rural primary school students in Northwest China, the results from a series of random-effects models controlling for student background and community economic and social resources shows that students who are taught by teachers who have official credentials, high levels of motivation to improve practice, commitment to the profession, and strong interpersonal skills have higher mathematics achievement. However, [18] study of teacher variables as predictors of academic achievement of primary school pupils in mathematics found that qualification and experience were not significant correlation with pupil's achievement in mathematics, Similarly, [19] in their study on teacher qualifications and student achievement in urban elementary schools found that student achievement is unaffected by whether classroom teachers have advanced degrees or not. Despite the fact that, the above researchers contributed to knowledge, none of them have directly examined how teachers' qualifications correlate with pupils' competence in 3Rs in primary school in Longido District. Therefore, is the duty of this study to fill this gap.

1.2.2 School facilities and pupils' competence in 3Rs. According [20] school facilities, refers to the school plant, that is, the school buildings, classrooms, library, laboratories, toilet facilities, offices and other materials and infrastructures that would likely motivate students towards learning. Educational facilities mean the entire scope of human, physical and social infrastructure provided by the school for the purpose of teaching/learning process [21]. In this particular study school facilities mean classrooms, desks, tables, chalkboard, books, class readers, lighting, learning/counting tools which facilitate pupils learning reading, writing and arithmetic skills in primary schools. Primary education as the initial stage of basic education is the foundation of any educational system. If this foundation is not strong enough, the whole educational system will be weakened. Physical facilities play an important role in teaching and learning, especially at the primary school age when the sense of imagination is still premature. The availability of adequate physical facilities such as classrooms, desks, chairs, libraries and toilets are an important factor in both attendance and achievement [22]. The government of Tanzania is struggling every year to improve teaching and learning environments by building classrooms, providing desks, chairs, pupils' books and teaching and learning materials. However, some education stakeholders air their voices on the shortage of desks for pupils in primary school. Over several decades, there has been a gradual deterioration in the facilities provided by the government for the running of education at the primary school level [23]. Theoretically, school facilities are positively correlated with pupils' competence in 3Rs in selected primary schools in Longido District. This section attempts to present research findings with regard to school facilities and pupils' competence in 3Rs. Several authors theorise on the school facilities (example [7]; [9]). For example, exploring literacy and numeracy, teaching in Tanzania classrooms; insights from teachers' classroom practices, [7] found that shortage of teaching and learning resources has influence on pupils' competence in the 3Rs. Similarly, [9] in their study of the influence of instructional media use in pupils' mastery of reading and writing in Kiswahili language in Kinondoni District in Tanzania found that teachers use hands-on activities in teaching reading and writing; they also use pictures, charts and diagrams. The results further indicate a negative yet weak correlation (-. 220) between mastery of reading and writing and the use of instructional media. [24] in his study of primary school teachers' practice in developing pupils with competency found that development of handwriting skills was impaired by overcrowded classrooms, lack of sufficient chairs and desks and the inability of parents or caregivers to provide pupils with essential writing materials. [25]quality education would entail learners who are healthy and ready to participate and learn under a supportive environment that is safe, protective, gender-sensitive, and provides adequate resources and facilities relevant to the curricula for the acquisition of basic skills, particularly in literacy and numeracy. All studies cited show that school facilities have an adverse impact on pupils mastering the 3Rs skills. None of the studies discussed above attempted to correlate school facilities with pupils' competence in 3Rs in primary schools in Longido District.

Thus, this study on the school facilities as correlates to pupils' competence in 3Rs in primary schools in Longido District in particular was designed to contribute towards filling this gap.

1.2.3 Socio-cultural factors and pupils' competence in 3Rs. According to [26] socio-cultural factors are those factors that affect the academic performance of students but originate from the unique circumstances surrounding their school or home. Example of socio-cultural factors include and not limited to language, religion, taboos, values, attitudes, social groups, family, rituals. Socio-cultural factors are the larger scale forces within societies and culture that affects the thoughts, behaviors and feelings of individual members of those societies and cultures [27]. Socio-cultural factors refer to large scale forces and practices within the cultures and opportunities[28]. societies offer more learning factors are larger scale forces within the societies and culture that have an impact on the thoughts, feelings and behaviors of the individual members of those societies and cultures [29]. In this particular study socio-cultural factors mean parent education level, family size, poverty of the family, home environment, life styles that influence pupils' competence in the 3Rs in primary schools. Theoretically, social-cultural factors are positively correlated with pupils' competence in 3Rs in selected primary schools in Longido District. According to [30] in their study of the factors influencing reading literacy at the primary school level found that students, high achievers in reading literacy usually like reading for their own enjoyment and come from families where parents spend a lot of time on reading. Another study by [31]on the factors that contributed to variations in reading and mathematics achievement among grade 6 pupils in 15 African school systems (Botswana, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, the Seychelles, South Africa, Swaziland, Tanzania, Uganda, Zambia, Zanzibar, and Zimbabwe) found that grade repetition, socio-economic background, pupil age, and pupil sex were the most important factors affecting variations in pupils' achievement in these school systems, while at the school level, school resources and school location were identified as the important common factors. South Africa and Zimbabwe were among the school systems with the largest school variation (especially in reading), while the Seychelles and Mauritius had the largest within school variation. [32] found enrollment of girls in Transmara West decreasing at the rate of 40 % (primary) and 10% (secondary) and Narok North increasing at the rate of 10% in both primary and secondary schools. For every 15 girls enrolled for KCPE, only 1 join secondary school in Transmara West and for every 10 girls, only 1 join secondary school in Narok North. Girls' transition rate to the University is 2.4% (Transmara West) and 1.0% (Narok North). Pearson tests reveal significant relationships between the parents' education (p=0.04) and mediating cultural factors; FGM (P=0.03), Pregnancies (p=0.00), Early marriages (p=0.03) on girls' participation. Coupled with poverty, low parents' level of education and fear of teenage pregnancies adds force to Female Genital Mutilation (FGM) and makes girls to opt for early marriages, shy off or absent in class and consequently drop out of schools. None of the studies mentioned above, attempted to address socio-cultural factor as correlates of pupils' competence in 3Rs in selected primary schools in the Longido District; therefore, it is the duty of this study to fill this gap.

II. Material And Methods

2.1 Research Design

The study was mainly quantitative approach in that it was based on variables measured by number and analysed with statistical procedures [33]. In particular the study was a correlation, cross-sectional survey design because the study intended to pick only some representative sample elements of the cross-section of the population. The study was a survey in that it involved a large number of respondents and cross-sectional because it was conducted across participants once and for all [33]. The study was correlational in that it is interested in relating teacher's qualification, school facilities and socio-cultural factors to pupils' competence in the 3Rs [34].

2.2 Sample and Sampling Techniques

The target population of the study was constituted of 210 teachers. The issue of sampling deserves consideration in this study. Sample was drawn from the population. According to [35] table of sample size(s) determination, suggest that if one has a population of size, N=210 units, one needs a minimum sample size, s=136. Therefore, for this [35] study, the researcher used a sample of 136 teachers. The respondents were randomly selected using the lottery method in first school till the required number was obtained [36]. The rationale behind of using simple random sampling procedure is that it allows an equal chance for all teachers in a sampling frame to be selected as respondents of the study [37].

2.3 Data Collection Methods

The study being a correlational cross-sectional, survey method of data collection was used to gather data from the sample at a period of time [38]. The researcher collected data from the respondents using Self-

Administered Questionnaires (SAQs). The SAQs enabled the researcher to collect the completed responses quickly and at a reasonable time [39].

2.4 Data analysis Techniques

The data collected was analysed using Statistical Package for Social Sciences (SPSS). Descriptive statistics were used in describing the sample data in such a way as to portray the typical respondent and to reveal the general response pattern. The analysed data were presented in the form of percentages and frequencies. All numerical variables such as the aggregate index on teacher's qualifications, school facilities and socio-cultural factors such analysis were univariate, that targeting one variable at a time. Inferential data analysis was used; bivariate analysis to test hypothesis that correlate each numerical independent variable with numerical dependent variable using Karl Pearson's Linear Correlation Coefficient (PLCC). Also multivariate analysis was used to test all three hypotheses at once using multiple linear regressions [36].

2.5 Validity of Research Instrument

The researcher ensured validity of the instrument by checking its content construct and face validity. Also, the study instrument was given to the experts in the field of education to determine whether the research instrument measured the intended objectives. The Content Validity Index (CVI) was computed to check content validity of the instrument. Thirty eight items out of forty one in the instrument were rated by both raters to be valid. Thus, 38/41 = 0.926, overall content validity of the study is 0.926. According to [37] content validity greater than 0.7 (>0.7) indicate the content of the instrument. Therefore, the instrument used was valid for the purpose of this study.

2.6 Reliability of the Instrument

The researcher ensured reliability of the instrument by pre-test it using Chronbach's alpha Coefficient. The samples of twenty teachers from one of the primary schools in Meru District Council were used and the data collected is used to pre-test the self-administered questionnaire. According to [37] Cronbach's alpha greater than 0.7 indicate the reliability of the instrument. Thus, the statistical analysis of the Cronbach's alpha value ranges between 0.708 to 0.879. The overall reliability of scale items was found to be 0.827. Thus, all forty one items on the self-administered questionnaire found to be satisfactory and reliable to be used in this study. Table 1 gives the Cronbach's alpha value:

Table 1: Cronbach's Alpha Values

Variables	No. of Items	Cronbach's Alpha
Pupils' Competence in 3Rs	6	0.866
Teacher's Qualifications	10	0.855
School Facilities	10	0.879
Socio-cultural Factors	10	0.708

III. Results

Table 2: Distribution of respondents by sex

Sex	Number of Teachers	Percentage
Female	89	65
Male	47	35
Total	136	100

Table 2 shows that almost 65% of teachers were female and 35% were male of the sample. This suggests that the majority of teachers in the surveyed secondary schools were female. This female dominance was contrary to the culture of majority ethnic groups in Tanzania who favour the provision of education for boys than girls [40].

Table 3: Distribution of respondents by age group

Age group (years)	Number of Teachers	Percentage	
Less than 20	1	07	
21- 40	112	82.4	
41 – 60	23	16.9	
Total	136	100	

Table 3 shows that 07% of teachers fall within less than twenty years age group, 82.4% of the teachers fall within 21-40 age group and 16.9% of teachers fall under above 41 - 60 age groups. This suggests that the

majority of teachers were young and new to the teaching profession about 83.1% who were still energetic and they can work for a long time.

Table 4: Distribution of respondents by marital status

Marital Status	Number of Teachers	Percentage
Single	46	33.8
Married	83	61
Divorce	07	5.1
Total	136	100

Table 4 shows that 61% of respondents were married. This suggests the majority of the teachers (61%) were married. This is not surprising by considering the time one graduated and employed one is matured to be married. This could explain why the majority were married.

Table 5: Distribution of respondents by education level

Education level	Number of Teachers	Percentage
Certificate	99	72.8
Diploma	31	22.8
Degree	06	4.4
Total	136	100

Table 5 displays that 72.8% of the respondents were had certificates. This means that the majority of teachers in the surveyed primary schools were qualified to teach primary level according to Tanzania education policy which requires primary school teachers to have a teaching certificate from the recognized institution.

Table 6: Distribution of respondents by teaching experience

Teaching experience	Number of Teachers	Percentage
Less than ten years	66	48.5
More than ten years	70	51.5
Total	136	100.0

Results in Table 6 suggests that most respondents, 51.5% had teaching experience more than ten years and only 48.5% respondents have teaching experience less than ten years. This suggests that the majority of teachers in the surveyed primary schools had enough teaching experience of more than ten years which is essential for pupils' competence in 3Rs.

3.1 Preliminary Testing of Hypotheses

This section deal with the testing of three study hypotheses and presents the results on how independent variables: teachers' education, school facilities and socio-cultural factors relate to dependent variable pupils' competence in the 3Rs.

3.1.1 Hypothesis One

One hypothesis of the study stated that "teachers' qualification is positively correlated with pupils' competence in 3Rs in selected primary schools in Longido District". To test this, the two numerical indices (Teachers' qualifications and pupils' competence in the 3Rs) were correlated using Pearson's Linear Correlation Index. Table 7 gives the pertinent results.

Table 7: Pearson's Linear Correlation between Teacher Education and Pupils' Competence in 3Rs

		Pupil's Competence in 3Rs	Teachers' Qualifications
Pupil's Competence 3Rs	Pearson Correlation	1	0.037
	Sig. (2-tailed)		0.668
	N	136	136
Teachers' Qualifications	Pearson Correlation	-0.037	1
	Sig. (2-tailed)	0.668	
	N	136	136

According to Table 7 the correlation between teachers' qualifications and pupil's competence in 3Rs using Persons linear correlation coefficient gave r = 0.668 and its Sig = -0.037 which is less than $\alpha = 0.05$. This

suggests that teachers' qualifications were positively correlated with pupil's competence in the 3Rs, thus acceptance of research hypothesis that, there was a significant relationship between teachers' qualifications and pupil's competence in the 3Rs in the surveyed primary schools in the Longido District at the five percent level of significance.

3.1.2 Hypothesis Two

The second hypothesis of the study was that "school facilities are positively correlated with pupils' competence in 3Rs in selected primary schools in the Longido District" Using responses under school facilities; the two numerical variables were correlated using Pearson's linear correlation coefficient as shown in Table 8:

Table 8: Pearson's Linear Correlation between school facilities and Pupils' Competence in 3Rs

		Pupils' Competence in 3Rs	School Facilities
Pupils' Competence in 3Rs	Pearson Correlation	1	0.626
	Sig. (2-tailed)		0.042
	N	136	136
School Facilities	Pearson Correlation	0.626	1
	Sig. (2-tailed)	0.042	
	N	136	136

Results in Table 8 show that school facilities and pupils' competence in 3Rs were positively related. Pearson's linear correlation coefficient statistics indicates r = 0.626 whose Sig = 0.042 which is far less than popular $\alpha = 0.05$ suggesting acceptance of the research hypothesis that school facilities was positively correlated with pupils' competence in 3Rs in primary schools in the Longido District at five levels of significance.

3.1.3 Hypothesis Three

The third hypothesis of the study was "socio-cultural factors are positively correlated with pupils' competence in 3Rs in selected primary schools in Longido District". To confirm this, the two variables (Socio-cultural factors and pupils' competence in 3Rs) were correlated using Pearson's linear correlation as in Table 9:

Table 9: Pearson's Linear Correlation between Socio-Cultural Factors and Pupils' Competence in 3Rs

rubic > 1 curson s Elifeur	Corretation between b	ocio Cuitarui ructoro a	ma r upiis Competence in Six
		Pupils' Competence in 3Rs	Socio-Cultural Factors
Pupils' Competence in 3Rs	Pearson Correlation	1	-0.127
	Sig. (2-tailed)		0.140
	N	136	136
Socio-Cultural Factors	Pearson Correlation	-0.127	1
	Sig. (2-tailed)	0.140	
	N	136	136

Table 9 suggests a significant correlation between socio-cultural factors and pupils' competence in 3Rs Sig = -0.127 which is far less than $\alpha = 0.05$. From the Table 9 it is inferred that socio-cultural factors and pupil's competence in 3Rs were negatively correlated, suggesting acceptance of the research hypothesis that socio-cultural factors are correlated with pupils' competence in 3Rs in selected primary schools in Longido District.

3.2 Confirmatory Test of Hypotheses

The multiple regression analysis was conducted to find out whether independent variables teachers' qualifications, school facilities and socio-cultural together predicts dependent variable pupils' competence in the 3Rs. Regression analysis results are given in Table 10, Table 11 and Table 12.

Table 10: Mode Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	0.152 ^a	0.023	0.001	0.57209	

Table 10 depicts that teachers' qualifications, school facilities and socio-cultural factors accounted for 15.2%. The value of the Adjusted R square is 0.001 which is approximately to 10% amount of variation explained by the independent variables. This means that 10% variation in the pupils' competence in 3Rs in the surveyed primary schools in Longido District can be explained by the independent variables. The rest 90% amount of variation of pupil's competence in 3Rs cannot be predicted by the independent variables in the study.

Table 4.11: Regression Model Summary

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression Residual Total	1.023 43.202 44.225	3 132 135	0.341 0.327	1.042	0.3769

ANOVA results in Table 11 gives an F statistic = 1.042 and its Sig value of 0.3769 which is greater than $\alpha = 0.05$. This implies that the independent variables (teachers' qualifications, school facilities and sociocultural factors) had a positive significance variation in the dependent variable (pupil's competence in 3Rs). Also, it suggests that the model was significantly fit at the 1% significance level.

Table 4.12: Regression Coefficient

Model	Unstandardized	Coefficients	Standardized Coefficients	T	Sig.
	В	Std. Error	Beta		
1 (Constant) Teachers Qualifications School Facilities Socio- cultural factors	4.910 - 155 -005 -107	0.851 0.160 0.056 0.065	-089 -008 -159	5.766 -971 -090 -1635	0.000 0.333 0.001 0.104

Table 12 indicates that the computed Sig value for independent teachers' qualifications and socio-cultural factors = 0.333 and 0.104 which was far greater than a popular Sig = 0.05 suggesting that teachers' education and socio-cultural factors were not significantly correlated with pupils' competence in 3Rs at the five percent significance level. Further, Table 12 reveals that school facilities had Beta value = -0.008 with significance level of 0.001 which is far less than 0.05, suggesting a significant correlation with dependent variable pupils' competence in the 3Rs. Hence, school facilities were found to be the only predictor for pupils' competence in 3Rs in the surveyed primary schools in Longido District.

3.2.1 Hypothesis One: Teacher Qualifications and Pupils' Competence in 3Rs. The first hypothesis (H₁) in the study was that teachers' qualification is positively correlated with pupils' competence in 3Rs in selected primary schools in Longido District, was not supported by the findings. The findings were in line with past studies of [18] who studied on teacher variables as predictors of academic achievement of primary school pupils in mathematics found that qualification and experience were not significant correlation with pupil's achievement in mathematics. Similarly, [19] studied on teacher qualifications and student achievement in urban elementary schools found that student achievement is unaffected by whether classroom teachers have advanced degrees or not. Also, [15] in their study of exploring literacy and numeracy, teaching in Tanzania classrooms; insights from teachers' classroom practices found that there were serious problems of literacy teaching in public primary schools where most the teachers do not have adequate skills of teaching it. About 64% of standard two pupils cannot read, write and do simple numeracy while for standard three it is about 54% cannot do that. Ironically, the findings of this study suggested that teacher qualifications were not positively correlated with pupils' competence in 3Rs this could be due the small sample size. Teachers' qualifications are still vital to the primary education, hence, should be encouraged by government and educational authorities and policy makers. Meanwhile the study led to the recommendation that future researchers to conduct further studies on these variables with relatively larger sample.

However, contrary the findings were given by [16] who studied on teacher qualification and the achievement gap in early primary grades found that students with a certified teacher for most of their early school experience scored higher in reading than students who did not have a certified teacher. In addition, certification was associated with slightly narrowing the academic gap between African American and European American students across early elementary grades.

3.2.2 Hypothesis Two: School Facilities and Pupils Competence in 3Rs. The second hypothesis (H₂) in the study, school facilities are positively correlated with pupils' competence in 3Rs in selected primary schools in Longido District, was supported by the findings, which was consistent with several past studies, like [41] study on challenges of primary education level in Tarime District, Tanzania found that teaching and learning materials were a very big challenge in many rural areas in Tanzania. Similarly, [15] found that shortage of teaching and learning resources had influence on pupils' competence in the 3Rs. Similarly, [42] in their study of the influence of instructional media use in pupils' mastery of reading and writing in Kiswahili language in Kinondoni District in Tanzania found that teachers use hands-on activities in teaching reading and writing; they also use pictures, charts and diagrams. The results further indicated a negative yet weak correlation (-. 220) between mastery of reading and writing and the use of instructional media. Therefore, school facilities are very important, government and education stakeholders should make sure that every school has enough enabling facilities such as furnished classrooms, well-endowed libraries, textbooks, enough table and chairs for students to sit on playgrounds. Further, the results of multiple regression analysis, which was conducted to confirm the correlation between school facilities and pupils' competence in 3Rs revealed that the correlation was not occurring by chance hence, confirm the positive correlation between school facilities and pupils' competence in 3Rs in selected primary schools in Longido District.

3.2.3 Hypothesis Three: Sociocultural factors and Pupils Competence in 3Rs. The third hypothesis (H₃) in this study, namely socio-cultural factors were positively correlated with pupils' competence in 3Rs in selected primary schools in Longido District, was not supported by the findings. This was contrary with past studies of [30] study of the factors influencing reading literacy at the primary school level found that students with high achievement in reading literacy usually like reading for their own enjoyment had been influenced by families where parents spend a lot of time on reading. Further, Another study by[31] on the factors that contributed to variations in reading and mathematics achievement among Grade 6 pupils in 15 African school systems (Botswana, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, the Seychelles, South Africa, Swaziland, Tanzania, Uganda, Zambia, Zanzibar, and Zimbabwe) found that grade repetition, socio-economic background, pupil age, and pupil sex were the most important factors affecting the variations in pupil achievement in these school systems, while at the school level, school resources and school location were identified as the important common factors. South Africa and Zimbabwe were among the school systems with the largest between-school variation (especially in reading), while the Seychelles and Mauritius had the largest within-school variation. H₃ was not supported by the study finding which can be due to relatively small sample size of 136 respondents. The findings lead to recommendation that future research to use large sample and investigate across districts for comparison purposes.

IV. Conclusion

This study assessed the correlation between teacher's qualifications, school facilities and socio-cultural factors and pupils' competence in 3Rs in selected primary schools in Longido District. The findings of this study have shown that there was no significant relationship between teacher's qualifications and pupils' competence in the 3Rs. Also the study has further shown that school facilities have no positive significant relationship pupils' competence in the 3Rs. The positive relationship meant that improvement in school facilities, for instance, led to improvement in pupils' competence in the 3Rs in surveying primary schools in Longido District. Further, the study revealed that socio-cultural factors were not significantly related to pupils' competence in the 3Rs. Based on the study findings and discussions, the following conclusions were drawn:

First, the teachers' qualification had nothing to do with pupils' competence in 3Rs in Longido District primary schools. Secondly, school facilities are found to be an index for pupils' competence in the 3Rs. Thirdly, pupils' socio-cultural background had nothing to do with pupils' competence in 3Rs in the surveyed primary schools in Longido District.

Theoretically, this study motivates more researchers to study on relationships between; teacher's qualifications, school facilities, socio-cultural factors and pupils' competence in 3Rs as will act as a literature and methodology for further studies. Practically; it is anticipated that this study would help the government authorities, school administrators, teachers and other education stakeholders to underlying relationship of teacher's qualifications, school facilities, socio-cultural factors and pupils' competence in the 3Rs. Also, the result of this can be used to identify opportunities for improvement of pupils' competence in 3Rs in primary schools. However, despite of its contribution, this study is not without limitations. Firstly, it was conducted on a single district; Longido District so we cannot compare it with the rest of the districts in Tanzania. Secondly, the sample of twenty students was relatively small, therefore due to sample size; it is difficult to generalize the findings of the study to the entire pupils in primary schools in Tanzania. Thirdly, this study examined only three independent variables that correlate with pupils' competence in 3Rs dependent variables yet there are other variables that could potentially relate to pupils' competence in 3Rs such as pupil characteristics, financial status and type of school (public/private). Future research efforts should focus on obtaining a larger and more

representative sample of the population. Further research is needed concerning other independent variables that can have correlation with pupils' competence in 3Rs. Despite of the above shortfalls this study should be seen as a step towards a positive contribution to the variables related to pupils' competence in 3Rs in primary schools in the Longido District in particular and other primary schools worldwide.

Reference

- A. Kulshrestha, K. P.-V. of research, and undefined 2013, "Teachers training and professional competencies," *voiceofresearch.org*, 2013, Accessed: Aug. 07, 2022. [Online]. Available: http://www.voiceofresearch.org/doc/mar-2013/Mar-2013_6.pdf. [1]
- M. Ojwan'g and E. K. Nyandika, "Determinants of ICT Integration in Teaching-Learning Activities in Private Secondary Schools [2] in Meru District Council, Tanzania," Int. J. Educ. Humanit. Soc. Sci., vol. 3, no. 4, pp. 447-464, 2020, Accessed: Aug. 14, 2022.
- URT, "Education Sector Development Plan (2016/17 2020/21)," 2016. [3]
- R. Makiya, C. Mnyanyi, and C. Ngirwa, "Quality Assurance Strategies in Enhancing Learning Achievement among Public Primary [4] Schools in Arusha Region, Tanzania," East African J. Educ. Soc. Sci., vol. 3, no. 2, pp. 48-57, Apr. 2022, doi: 10.4314/eajess.v3i2.
- [5] L. Pritchett and A. Beatty, "The Negative Consequences of Overambitious Curricula in Developing Countries," SSRN Electron. J., Mar. 2013, doi: 10.2139/SSRN.2235869.
- B. M. Ngussa and N. Mjema, "Factors Influencing Mastery of 3Rs among Learners of Primary Schools in Ilala District, Tanzania," [6] Saudi J. Humanit. Soc. Sci., vol. 2, no. 7, pp. 523-533, 2017, Accessed: Aug. 11, 2022. [Online]. Available: https://www.researchgate.net/publication/319306909_Factors_Influencing_Mastery_of_3Rs_among_Learners_of_Primary_Schools in Ilala District Tanzania.
- V. N. Anney and M. Mmasa, "Exploring Literacy and Numeracy Teaching in Tanzanian Classrooms: Insights from Teachers' Classroom Practices," vol. 7, no. 9, 2016, Accessed: Aug. 11, 2022. [Online]. Available: www.iiste.org. [7]
- K. A. Gafoor, "Elementary competencies in 3R's among upper primary pupils of Kerala: A secondary analysis," no. July, 2016. [8]
- B. M. Ngussa and A. Chiza, "The influence of instructional media use on pupils' mastery of reading and writing in Kiswahili [9] Language in Kinondoni District, Tanzania," Int. J. Educ. Policy Res. Rev., vol. 4, no. 8, pp. 187–194, 2017, Accessed: Aug. 11, [Online]. https://www.researchgate.net/publication/318902172 The influence of instructional media use on pupils' mastery of reading and_writing_in_Kiswahili_Language_in_Kinondoni_District_Tanzania.
- E. W. Marima, "A Survey of Approaches Used in Teaching Reading in Early Childhood Classes in Dagoretti and Westlands Divisions, Nairobi County, Kenya," *J. Educ. Pract. www.iiste.org ISSN*, vol. 7, no. 33, 2016, Accessed: Aug. 11, 2022. [Online]. [10] Available: www.iiste.org.
- M. Strong, "The highly qualified teacher: what is teacher quality and how do we measure it?," p. 155, 2011. [11]
- T. O. Adu, E.I. and Abe, "Influence of Qualification On Development and Assessment of Computer Programmed Instructional Package on Energy Concept in Upper Basic Technology in Ekiti State.," J. Sci. Technol., vol. 3, pp. 611-618, 2013, Accessed: Aug. 2022 Available: https://www.scirp.org/(S(lz5mqp453ed [Online]. snp55rrgjct55))/reference/referencespapers.aspx?referenceid=3045098.
- [13] L. Goe and L. M. Stickler, "Teacher Quality and Student Achievment: Making the Most of Recent Research," Washington, 2008. Accessed: Aug. 11, 2022. [Online]. Available: www.ncctq.org/link.php.

 A. J. Kola, O. S. Sunday, and G. I. Ayinde, "Teachers' Effectiveness and its Influence on Students' Learning," *Adv. Soc. Sci. Res.*
- [14] J., vol. 2, no. 4, Apr. 2015, doi: 10.14738/assrj.24.1082.
- [15] M. Mmasa, V. N. Anney, and N. Ndunguru, "Exploring literacy and numeracy teaching in Tanzanian classrooms: Insights from teachers' classroom practices," J. Educ. Pract., 2016.
- [16] D. Easton-Brooks and A. Davis, "Teacher qualification and the achievement gap in early primary grades," Educ. Policy Anal. Arch., vol. 17, pp. 1-16, Jan. 2009, doi: 10.14507/EPAA.V17N15.2009.
- J. Adams, "Identifying the Attributes of Effective Rural Teachers: Teacher Attributes and Mathematics Achievement among Rural [17] Primary School Students in Northwest China," Jan. 2012. Accessed: Aug. 09, 2022. [Online]. https://repository.upenn.edu/gansu_papers/32.
- [18] A. Tella, "Teacher Variables As Predictors of Academic Achievement of Primary School Pupils Mathematics," Int. Electron. J. 11, Educ., vol. no. 1 2008. Accessed: Aug. 2022 [Online]. https://www.researchgate.net/publication/26624620_Teacher_Variables_As_Predictors_of_Academic_Achievement_of_Primary_S chool_Pupils_Mathematics.
- [19] G. Buddin, Richard & Zamarro, "Teacher qualifications and student achievement in urban elementary schools," J. Urban Econ. 103-115, Elsevier, vol. 66, no. 2, pp. 103–115, 200 https://ideas.repec.org/a/eee/juecon/v66y2009i2p103-115.html. 2009, Accessed: Aug. 11, 2022. [Online].
- C. O. Akomolafe and V. O. Adesua, "The Impact of Physical Facilities on Students' Level of Motivation and Academic [20] Performance in Senior Secondary Schools in Southwest Nigeria," J. Educ. Pract., vol. 7, pp. 38-42, 2016, Accessed: Aug. 11, 2022. [Online]. Available: https://www.scirp.org/(S(lz5mqp453edsnp55rrgjct55.))/reference/referencespapers.aspx?referenceid=3072032.
- P. A. Adigeb, P. M. Anake, and A. A. Ndie, "The Impact of Educational Facilities on Students' Teaching/Learning Process in [21] Abeokuta, Ogun State, Nigeria: Need for Counselling Approaches," Eur. J. Educ. Stud., vol. 3, no. 9, pp. 611-626, 2017, Accessed: Aug. 11, 2022.
- O. S. Kapinga, "Assessment of School Facilities and Resources in the Context of Fee Free Basic Education in Tanzania," Int. J. [22] Educ. Res., vol. 5, no. 6, 2017, Accessed: Aug. 11, 2022. [Online]. Available: www.ijern.com.
- **[23]** S. Ileoye, "Effects of School Facilities on pupil's Satisfaction with Schooling in Ondo State, Nigeria."
- P. Tandika, "Primary School Teachers' Practices in Developing Pupils with Writing Competency," 2017.
- [25] A. Tshabangu, I. and Msafiri, "Quality Education in Tanzania Perceptions on Global Challenges and Local Needs," Int. J. Asian Soc. Sci., vol. 3, pp. 800-813, 2013, Accessed: Aug. 11, 2022. [Online]. Available: https://www.scirp.org/(S(351jmbntvnsjt1aadkposzje))/reference/referencespapers.aspx?referenceid=2897823.
- [26] S. J. O. Odanga, "Influence of Socio-cultural Factors on Performance in Examinations in Kenya," Asian Res. J. Arts Soc. Sci., vol. 7, no. 1, pp. 1–14, Jul. 2018, doi: 10.9734/ARJASS/2018/41051.
- [27] H. Akintoye and J. Saliu, "Impact of Socio-Cultural Factors on Senior Secondary School Students" Academic Achievement in Physics," Int. J. Res. Sci. Innov. /, vol. VII, 2020, Accessed: Aug. 11, 2022. [Online]. Available: www.rsisinternational.org.
- [28] J. K. Mgalula, "Socio-Cultural Factors Affecting Academic Performance of Girls in Public Secondary Schools in Nzega District,
- [29] A. Saeeda Iqbal and A. Abdul Ghafoor, "the Impact of Corporal Punishment on Students' Performance in the Impact of Corporal

- Punishment on Students 'Performance in Public Schools," *Glob. J. Manag. Soc. Sci. Humanit.*, vol. 4, no. 3, pp. 606–621, 2018, Accessed: Apr. 27, 2020. [Online]. Available: https://www.researchgate.net/publication/326489983%0ATHE.
- [30] A. Geske, A. Ozola, A. Ozola, and A. Ozola, "Factors Influencing Reading Literacy at the Primary School Level," *Probl. Educ.* 21st Century, vol. 6, 2008.
- [31] N. Hungi, "Accounting for Variations in the Quality of Primary School Education," Paris, France, 7, 2011.
- [32] S. K. Rotich, K. J. Rono, and S. M. Mutisya, "View of University Education of the Maasai Girls in Kenya at Crossroad: A Viewpoint of the Role of local leaders and Socio-Cultural factors.," *Int. J. Soc. Sci. Humanit. Invent.*, vol. 1, no. 1, pp. 51–61, 2014, Accessed: Aug. 11, 2022. [Online]. Available: https://valleyinternational.net/index.php/theijsshi/article/view/5/5.
- [33] J. W. Creswell, "Research design: qualitative, quantitative, and mixed methods approaches," p. 246, 2003.
- [34] M. Kornfeld, "The Effect of Class Size on Student Achievement in a Rural State," *Univ. Vermant*, Nov. 2010, Accessed: Aug. 11, 2022. [Online]. Available: https://scholarworks.uvm.edu/graddis/128.
- [35] Krejciea and Morgan, "Determining Sample Size for Research Activities," *Educ. Psychol. Meas.*, vol. 30, pp. 607–610, 1970, Accessed: Aug. 11, 2022. [Online]. Available: https://www.scirp.org/(S(351jmbntvnsjt1aadkposzje))/reference/ReferencesPapers.aspx?ReferenceID=1809246.
- [36] V. M. Tarimo, D. Bahati, and R. A. Labito, "Teachers' Workload and Class Size as Correlate of Students' Academic Performance in Selected Secondary Schools in Singida Urban," *Int. J. Sci. Res. Manag.*, 2020, doi: 10.18535/ijsrm/v8i04.el03.
- [37] J. McMillan and S. Schumacher, Research in Education Evidence-Based Inquiry, 6th ed. USA: Pearson Education, Inc., 2006.
- [38] M. . Amini, Social Science Research: Conception Methodology and Analysis. Kampala, 2005.
- [39] U. Sekaran, Research Methods for Business A Skill-Building Approach, 4th ed. New york: John Wily & Sons, Inc., 2003.
- [40] V. M. Tarimo, "School Organizational Culture, Family Background, School Environment as Determinants of Students' Academic Performance in Selected Secondary Schools in Meru District, Arusha, Tanzania," *IJRDO - J. Soc. Sci. Humanit. Res.*, vol. 5, no. 4, pp. 12–27, Apr. 2020, doi: 10.53555/SSHR.V514.3598.
- [41] G. Chach, "The Challenges of Primary Education Level in Tanzania. Case study Tarime district," *IOSR J. Humanit. Soc. Sci.*, vol. 16, no. 3, pp. 01–06, 2013, doi: 10.9790/0837-1630106.
- [42] B. Manjale Ngussa and A. Chiza, "The influence of instructional media use on pupils' mastery of reading and writing in Kiswahili Language in Kinondoni District, Tanzania," *Int. J. Educ. Policy Res. Rev.*, vol. 4, no. 8, pp. 187–194, 2017, doi: 10.15739/IJEPRR.17.020.

Valentine Mathias Tarimo. "Teachers' Qualifications, School Facilities and Socio-cultural Factors as Correlate to Pupils' Competence in 3Rs in Selected Primary Schools in Longido District, Tanzania." *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 12(05), (2022): pp. 08-18.