

Effectiveness of professional suitability scale in assessing teaching suitability among primary school teachers in Tanzania

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Abstract

This study intended to evaluate effectiveness of professional suitability scale (PSS) in assessing primary school teachers' suitability for teaching profession in Tanzania in an attempt to address the challenges of professional unsuitability among teachers in Tanzania. Specific objectives of this study were to explore the structure, validity and reliability of PSS in assessing the professional suitability among primary school teachers, to examine effectiveness of PSS in measuring differences in professional suitability among teachers by region and to examine the effectiveness of PSS in measuring differences in professional suitability between teachers in private schools and government schools. Data were collected among 365 primary school teachers using 26 items of the PSS. Principle Component Analysis (PCA) revealed that PSS is a valid four-factor scale comprised of social, practical, personal, and ethical suitability. It was also found out that PSS is a reliable tool with an internal consistency of Cronbach's alpha coefficient of $\alpha = .79$. Results further revealed no significant difference in professional suitability by region but found out significant difference in professional suitability with school ownership and school performance category (Low versus High Performing Schools). It was concluded that although PSS is an effective tool for measuring professional suitability among teachers, the difference in school performance by region or ownership can just partly be explained by teachers' professional suitability. It was recommended that PSS may assist employers in assessing their employees' suitability for teaching and that future studies may undertake a validation study for further improvement of the PSS.

Keywords: suitable teachers, teaching profession, validity and reliability, scale, assessment of teachers.

Introduction

Professional unsuitability has been reported as a challenge in Tanzania given lack of explicit policy and guidelines for developing teachers professionally and the skills to undertake the same (Komba & Mwakabenga, 2020). This has resulted in teachers' inability to demonstrate the universal professional standards, knowledge, skills, values and appropriate behaviour. The term "teachers' suitability" refers to the condition of being fitted for the purpose of providing services to the public (College of Educational Therapists, 2010). In this study, the term has been specifically used to mean social, practical, personal and ethical suitability. As such, throughout this paper, the teacher is socially suitable when he/she is able to interact friendly with students in normal talks, give advice to students, provide counselling, answer students' questions, encourage students to participate in the lesson and use language supportive techniques in teaching and learning sessions.

The teacher is also defined as practically suitable when he/she consistently attends classes as planned in the schedule, seeks to achieve the maximum learners' understanding, provides assignments in every lesson, marks pupils' assignments, tests and exams on time, provides homework and when he/she is respected both at school and in the community around. The teacher is further considered to possess personal suitability when he/she dresses in a decent way, he/she is loved and respected by his/her students, appears smart, fairly gives each student an opportunity to answer the questions and involves both males and females equally in the learning process. The teacher is defined as ethically suitable when he/she is considered as a role model to students, willingly provides his/her extra time for remedial classes and uses different materials such as maps, drawings, pictures, radio, TV or other materials in the teaching. He/she is further defined as ethically suitable when he/she considers the learning process to ensure students' understanding, provides weekly and monthly tests and enters and leaves the classes timely.

It is undeniable fact that the teacher is considered to be the cornerstone of educational development, and plays a crucial role in determining the quality, effectiveness and relevance of education and has been recognized as a prerequisite to achieving poverty eradication, sustainable human development and equity (Bennell & Mukyanuzi, 2005; HakiElimu, 2011). Nyamubi (2013) also revealed that the success of any education system depends greatly on

teachers' allegiance so that education quality can be achieved in schools through skilled, knowledgeable and suitable teachers. However, this will remain a dream unless those who join the teaching profession in Tanzania truly possess the disposition for succeeding in teaching. Atputhasamy and Chuan (2001) argue that although it is important for the education system of any country to ensure enough teachers in the teaching profession, the governments must also strive to attract the most capable and suitable people who are most likely to stay, work hard and feel satisfied in the profession. While the problem of recruiting and retaining suitable teachers for teaching has been repeatedly reported in literature in different countries, various studies conducted in different countries show that teachers in many countries are still recruited for the teaching profession based on their academic performance, ignoring the aspect of whether or not such individuals are suitable for teaching (Kwok-wai, 2006; Mngarah, 2016; Mulkeen, 2010; Mulkeen et al., 2007). This has been a serious challenge facing the education sector in many countries due to the fact that there has been no effective tool to determine the teachers who are suitable for the teaching profession. Hence, this study intended to fill this knowledge gap.

The teachers who expect to succeed in teaching should recognize that teaching is a vocation rather than gainful employment. Those who are aware of this fact will desire to remain working in the school, thus devoting their time to accomplishing various school activities during and after normal working hours (Nyamubi, 2013). Ngimbudzi (2009) maintains that teachers' commitment and effectiveness depend on job satisfaction. This means that teachers who are dissatisfied with their jobs negatively affect students' academic performance, social growth, moral development and maturity while those who are satisfied with their jobs have a positive impact on students' academic performance (Ayan & Kocacik, 2010).

In Tanzania, people who join the teaching profession are selected based on their academic performance rather than their interest, commitment and dedication to teaching profession's roles. The academic performance encourages any person to opt for a career in education even when some of them do not possess the required attributes for teaching (Mkumbo, 2012).

In Tanzanian context, the teachers are categorized based on their educational qualifications. Each level of school requires particular educational qualifications for the teaching force (Komba & Nkumbi, 2008). This implies that individual teachers have to meet certain requirements before they are employed as elementary, primary or secondary school

teachers (Ngimbudzi, 2009). However, there have been situations where the training and placement of teachers in schools follow the social demand rather than adhering to professional needs.

The current teaching workforce in Tanzania's primary schools is comprised of teachers with qualifications such as grade IIIC, IIIB, IIIA, diploma, bachelor degree, master's degree and PhD. According to Act No.8 of 2002 as amended by Act No. 18 of 2007, the teachers in Tanzania are recruited by the Teachers' Service Commission. However, the Act provides the powers to the Teachers' Service Commission to delegate such powers to other central government institutions. Due to this opportunity, the Teachers' Service Commission delegated powers to the President's Office Regional Administration and Local Government (PO-RALG) to recruit teachers. Up to 2014, the primary school teachers were recruited for teaching soon after their graduation. They were posted to districts and the District Education Officers (DEOs) in consultation with the District Executive Director (DEDs) were responsible for allocating the recruited teachers to primary schools ready for teaching. However, currently, teachers are recruited and posted directly to schools by the PO-RALG.

After the adoption of Universal Primary Education (UPE) in the late 1970's, the government decided to employ some students who had completed seven years of primary education as Grade IIIC teachers after undergoing a short non-residential course (Komba, 2007; Komba & Nkumbi, 2008). This programme was initiated in order to overcome the shortage of teachers which was the major obstacle to the implementation of UPE at that time. Grade IIIB teachers are those who completed seven years of primary education and then recruited to join the teaching force having undergone 3 to 4 years in a teacher education college. Grade IIIA teachers are those who have attained an Ordinary Level Certificate of Secondary Education and have undergone training for one or two years in a teacher education college (Komba, 2007; Komba & Nkumbi, 2008).

The Education and Training Policy of 1995 specified that the minimum pass required for one to join a teacher education certificate course was division III Certificate of Secondary Education Examination while for one to join a diploma certificate course, the minimum pass was division III in Advanced Certificate of Secondary Education (Ministry of Education and Culture, 1995). However, these qualifications were, in practice, occasionally ignored, although the target was to improve the quality of the education provided. For example, during the implementation of the Primary Education Development Programme (PEDP) I (2002/2006) and

II (2007/2011), the minimum entry qualification for those joining Grade IIIA teacher training programme was division IV with 28 points.

During the academic year 2012/2013, the government decided to improve the quality of education and so, the cut off-points were changed from division IV with 28 points to division IV with 27 points (MoEVT as cited in Chediel, 2013). During the academic year 2014/2015, the government abandoned the Grade IIIA Certificate of teacher education and introduced the Ordinary Diploma in Primary Education instead. For one to join the Ordinary Diploma in Primary Education, the minimum qualification was division III Certificate of Secondary Education Examination or in-service teachers in possession of Grade IIIA certificate with a teaching experience of two years and above. The pre-service teachers were trained for 3 years while the in-service teachers were trained for 2 years. However, through the educational circular number 5 of 2016, MoEST abandoned the training of teachers for Ordinary Diploma in Primary Education in 2016 (Ministry of Education Science and Technology (MoEST), 2016). MoEST directed that the training of primary school teachers should be at the level of Grade IIIA instead. Upon the completion of both Grade IIIA and Diploma courses, the teachers are more qualified to teach in primary schools.

As discussed above, the teachers are recruited to join the teaching profession in Tanzania based on academic performance as the main criterion. However, it should be noted that the large number of the teaching force in Tanzanian primary schools constitutes the teachers whose performance was low in their Certificate of Secondary Education Examination (CSEE) as most of them attained division IV in the Form IV examinations. It is normal to find that most of these teachers had a lot of career dreams when pursuing their secondary school education. It is also apparent that most of the students were interested in careers that paid well before taking their Form IV examinations. While some of them preferred being the medical doctors, engineers, accountants, pilots and so on, some of them were interested in teaching. Having obtained their Form IV examination results, most of those who attained division IV were likely to change their dreams abruptly from being doctors, engineers or accountants to being teachers since teaching required lower passes than other careers. This implies that teaching was not the first choice for most teachers who were trained through this procedure. Therefore, the critical issue is the extent to which teachers recruited for teaching in primary schools are professionally suitable for the teaching profession. However, it should be noted that the quality education outcomes depend on the quality and suitability of the teachers who are the main actors in the teaching and learning process.

According to Tam and Coleman (2009), professional suitability is characterized by personal, ethical, practical and social suitability. In this study, personal suitability involves the dress code, empathy and smartness. Ethical suitability involves respecting learners, being a good role model, fairness and attending classes. Practical suitability involves the language use, relevance, time management, clarity, problem-solving ability and subject mastery. Social suitability involves interacting with learners and encouraging them to participate in teaching and learning activities (MoEVT, 2007, 2010). Hence, in the Tanzanian context, a suitable teacher is the one who possesses those attributes.

Since the teaching profession in Tanzania lacks criteria for identifying people who are likely to be committed to teaching other than academic qualifications, the graduates in teaching have been linked to lack of professional and ethical behaviours (Anangisye, 2006, 2010; Boimanda, 2004; Mngarah, 2008). Therefore, there is a need to develop a tool which could measure the teaching professional suitability. This work is an attempt to introduce the Professional Suitability Scale (PSS), a tool which was developed by authors to measure the teachers' professional suitability.

Another important concern with regard to teaching suitability in Tanzanian primary schools is the prevailing difference in school performance by regions whereby some regions have been consistently performing better in the national primary school examinations than others (President's Office; Regional Administration and Local Government, 2019). The logical question is whether or not the teachers in the regions that demonstrate outstanding performance are professionally suitable than those in the regions with low performance. This concern led to the need to develop and examine the effectiveness of PSS in measuring the differences in terms of professional suitability among teachers by regions.

The primary school performance in the national examinations has also been observed to differ in terms of school ownership whereby the private primary schools have been performing relatively better than the government schools. An important issue here was whether or not PSS could be effective in examining the difference in terms of professional suitability between the teachers in private schools and their counterparts in government schools.

Statement of the Problem

It is generally agreed that the school performance is associated with multifaceted factors including learners' history, affective and cognitive characteristics as well as quality of instruction (Bloom, 1976; Joshua, 2021). Yet there is a lack of effective tool to measure the

teachers' professional suitability in Tanzania apart from academic qualifications (Anangisy, 2006, 2010; Boimanda, 2004; Mngarah, 2008). In addition, the school performance seems to be desegregated by regions and school ownership, thus raising questions on whether or not the teachers' professional suitability could differ with regions and government or private school ownership. However, the previous studies, so far, have been silent regarding the specific tool that could measure the professional suitability among teachers in Tanzanian primary schools and its effectiveness in measuring professional suitability differences with regional difference and school ownership nature. Therefore, this paper reports a study whose intention was to evaluate the effectiveness of the Professional Suitability Scale (PSS) in assessing teaching suitability among primary school teachers in Tanzania.

Research Objectives

This paper sought to address the following objectives:

1. To explore the structure, validity and reliability of PSS in assessing professional suitability among primary school teachers in Tanzania;
2. To examine the effectiveness of PSS in measuring difference in professional suitability among teachers by regions and
3. To examine the effectiveness of PSS in measuring difference in professional suitability between teachers in private schools and their counterparts in government schools.

Research Methodology

Research Approach and Design

Given the nature of the required data (psychometric analysis of reliability and validity) and difference in the observed teaching and learning practices, the study employed the quantitative research approach under which the survey design was specified. It also employed a cross-sectional survey to obtain the data from primary school teachers and pupils to determine the teachers' suitability for the teaching profession. The survey research design is acknowledged by various authors to be a cost-effective way of collecting data from a large group of respondents in a short period of time (Cohen, Manion and Morrison, 2007). The survey design was suitable for the study due to large sample of respondents, which filled the questionnaires to collect data with the aim of generalizing the findings from the sample to a wider population (Babbie, 2007; Creswell, 2009).

To overcome the possibility of self-reporting bias that might happen by using the TPSS, researchers used the Teachers' Observational Protocol (TOP) to observe teachers' suitability in terms of their ability to foster divergent thinking, convergent thinking and metacognitive skills to students. Two Juries observed and analysed the recorded classroom video to score the teachers' fostering ability. The protocol measured 13 specific variable items under Divergent thinking skills, 7 under Convergent thinking skills, and 8 under Metacognitive Skills. The juries were the learned individuals in the field of education. The researchers and the observers discussed the items in the protocol for agreement on what is and what is not meant by fostering the divergent, convergent, and metacognitive thinking by the teacher.

In addition, reliability of the teacher observation protocol instrument was confirmed by checking for inter-coder consistency. Two juries were given the video films together with the criteria for observation. The juries were the learned individuals in the field of education. The researcher and the observers discussed the items in the protocol for agreement on what is and what is not meant by fostering the divergent, convergent, and metacognitive thinking by the teacher.

Location of the Study

The data were collected in Tabora, Dodoma, Dar es Salaam and Kilimanjaro Regions. During the data collection, Tabora and Dodoma were in the list of the least performing regions category while Dar es salaam and Kilimanjaro were in the list of high performing regions category (MoEST, 2016). An assumption behind selecting these regions was due to the fact that the regions whose schools demonstrated high academic performance would have the teachers with better teaching professional suitability than in the category of the least performing regions.

Population, Sampling Procedure and Sample Size

The target population was primary school teachers who were estimated to be 18,543 in the regions of interest (MoEST, 2016). The primary school teachers were selected assuming that they play an important role in educating society by moulding the minds and characters of the present and future members of society through provision of knowledge, skills and values to children at their early years, a critical time at which the foundation of successful adulthood is laid (Nyamubi, 2013). Guided by the Cohen's et al. (2000) statistical table for sample selection criteria, the sample size of at least 377 teachers would be appropriate for a sample size. The total number of 400 questionnaires were distributed to consented primary school teachers. After the data collection, the returned questionnaires were checked for accuracy of the expected data.

This process revealed that some questionnaires were incomplete to the extent that the set of data required for analysis could not be achieved. The incomplete questionnaires were excluded from the analysis. The total number of questionnaires with complete information, which was used in the final analysis was 365, comprising 91.5 percent of the questionnaires distributed to teachers.

Development of the PSS

The PSS was developed based on the teacher performance assessment measures set by the MoEVT (MoEVT, 2010), ideal teaching behaviours set by the MoEVT (MoEVT, 2007) and defining criteria of professional suitability developed by Tam and Coleman (2009). According to MoEVT (2007), a suitable teacher should demonstrate mastery of the subject matter and some ideal teaching behaviour such as patience, reflection, fairness, attentiveness, language, empathy, tolerance, ambience, emphasis, variety, relevance, clarity and problem solving. Additionally, MoEVT (2010) set a measure to be used for assessing the teachers' classroom teaching. Among other issues, the measure includes items to measure the teachers' ideal behaviours. This measure is used by education quality assurers to assess how well the teachers adhere to the requirements of the teaching profession. Tam and Coleman (2009) describe a suitable teacher as one who possesses a comprehensive understanding of educational knowledge, skills, and values, combined with the performance of appropriate professional behaviours in specific practical situations. They argue that professional suitability is characterized by four factors which include personal, ethical, practical and social suitability. In developing the PSS, the teacher performance assessment measure set by the MoEVT (MoEVT, 2010) helped the researcher to develop the items to measure teachers' professional suitability regarding the use of teaching aids, teachers' dress code and time spent in classes. Furthermore, the ideal teaching behaviours set by the MoEVT (MoEVT, 2007) helped the researcher to develop items to measure the teachers' professional suitability with respect to learners, being a good role model, fairness, class attendance, language use, relevance, time management, clarity, problem-solving ability, mastery of the subject matter, interaction with the learners and encouragement of learners to participate in teaching and learning process. Lastly, the defining criterion of professional suitability developed by Tam and Coleman (2009) was ideal for this study as it helped the researcher to categorize professional suitability into the four characteristics of social, practical, personal and ethical and their associated items. The scores in the PSS implied that the higher the score the more suitable the teacher is and the lower the score the more unsuitable the teacher is.

On the other hand, the Teacher Education Development and Management Strategy (TEDMS) 2007/2008 to 2010/2011 established that apart from exhibiting mastery of the subject matter, the suitable teachers also need to master and exhibit the ideal teaching behaviours listed in Box 1.

Box 1: Desired Behaviours Exhibited by Suitable Teachers

Patience	Being patient with the diverse abilities and speed of learners
Fairness	Being fair to all the students and honest in delivery
Attentiveness	Clearly focusing attention on individual needs as well as the whole class
Language	Using clear and simple language to be understood by all
Empathy	Showing empathy, love, care and willingness to help learners and try to be in their shoes
Tolerance	Being tolerant of the diverse views and mannerisms
Ambience	Creating a good ambience in all learning situations
Emphasis	Stressing important points in learning
Variety	Demonstrating mastery of different teaching skills since the students differ greatly interests and abilities
Reflection	Reflecting on what to teach, when, why, how to teach it, how one taught it, and how one would teach it again in the future
Relevance	Remaining focused on the goals of the lesson
Clarity	Giving unambiguous messages on what matters and why
Problem Solver	Demonstrating the ability to solve problems, such as investigating, probing, sequencing and understanding
Mastery	Showing evidence of mastery and internalization of the subject matter
Humility	Doing things in a humble and modest way without pride and exaggeration and engaging in self-elevation
Interaction	Constantly keeping in touch with students, peers and the community and promoting positive image of teachers and teaching as a profession and education as an institution
Use of time	Efficiently and effectively using classroom time for effective learning
Good role model	Demonstrating good behaviours that can be emulated by students

Adaptability	Ability to adapt teaching to new situations and needs including improvisation
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Source: Teacher Education Development and Management Strategy 2007/2008 – 2010/2011 (MoEVT, 2007, pp. 10 – 11).

Data Collection

The data were collected using one questionnaire within which both PSS and demographic information were inquired. Questionnaire scripts were distributed to teachers.

Data Analysis

The data obtained through PSS were also coded, entered into the computer and analysed using SPSS version 21. After summing up the items in the scale, the information from PSS, which included frequencies and percentages was subjected to descriptive statistics. The collected data were processed and entered into the SPSS version 21. This was followed by reversing the negative worded items in the PSS. The reversed items were: Item 3: *I leave the class early before the period ends*; Item 20: *I prefer to choose some of the pupils to answer questions*; Item 21: *I, sometimes, use difficult language to the extent that learners need more clarifications to understand the meaning of the words* and Item 23: *My students are afraid of me*. A Principal Component Analysis (PCA) was then conducted on all the 26 items using a varimax with Kaiser Normalization. Further, chi-square analysis was performed to examine the difference in teaching professional suitability with regions and school ownership.

Ethical Considerations

The researchers fully adhered to ethical issues. The permission to conduct the study was sought and obtained from the relevant authorities. The data in this study inquired information from human respondents. However, the information required were not so much at personal capacity or subjecting persons into any laboratory manipulation. However, the respondents were informed about the purpose of the study, and they willingly consented to participate by signing the consent forms. The researchers further treated the information provided by the respondents confidential and the same was only used for the purposes of this study. Further, the respondents' names were not revealed anywhere in the reporting of the results or shared with other persons.

Results

This part presents the results of the study based on study objectives.

Validity and Reliability of PSS

Structure and Validity of PSS

In this study, the PSS was accompanied by some background information (demographic information). The PSS was employed by teachers and pupils. The difference between the PSS which was provided to teachers and that which was provided to pupils was the aspect of language. For example, the PSS which was given to teachers comprised the item which read “*I attend all periods as planned in the timetable*”. It was modified to read “*Our teacher attends all periods as planned in the timetable*” in the PSS provided to pupils. Twenty-six items were developed on a Likert-scale to assess the teachers’ professional suitability. The teachers were required to tick one of the five options which ranged from 5 “*Always*”, 4 “*Almost always*”, 3 “*Often*”, 2 “*Occasionally*”, to 1 “*Never*”.

The PSS was developed in English and later on translated into Kiswahili. The Kiswahili version was then employed to collect the data from 150 primary school teachers. The Kaiser–Meyer–Olkin (KMO) measure verified the sampling adequacy for the analysis, KMO = .807. All KMO values for the individual items were greater than .70, which was considered acceptable because it was above the limit of .5 (Field, 2009). The Bartlett’s Test of Sphericity was $p < .001$ in attempt to indicate the support on the factorability of the correlation matrix as Bartlett (1954) suggests. An initial analysis was run to obtain eigenvalues for each component in the data whereby the social suitability comprised an eigenvalue of 5.61, practical suitability of 2.94, personal suitability of 1.62 and ethical suitability of 1.464. The four components had eigenvalues over Kaiser’s criterion of 1 and in combination which explained 44.72 percent of the variance. Therefore, the PCA suggested that the final structure of the PSS is a four-factor scale which comprised social, practical, personal and ethical suitability as indicated in Table 1.

Table 1: Rotated component matrix for TPSS structure

Statement	Component			
	Social suitability	Practical suitability	Personal suitability	Ethical suitability
I participate in giving advice about pupils’ future.	.698			
When a pupil has a problem, I help him/her through counselling.	.682			
I interact with pupils when performing outdoor activities.	.660			
I fully interact with students in the teaching and learning process.	.623			

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I answer the pupils' questions when teaching.	.589		.402	
I encourage the students to participate fully in the lesson.	.529			
My students understand the language that I use when teaching.	.464			
I sometimes use difficult language to the extent that learners do not understand the meaning of some of the words.				
I attend all lessons as planned in the timetable.		.640		
When I teach, my students understand the lesson well.		.611		
I attend school in all school days.		.580		
I provide assignments in every lesson.		.567		
I mark the pupils' assignments, tests and exams on time.		.501		
I am highly respected at school and in our street or village.		.471		
I provide homework.		.447		
I dress in a decent way.				
My students are afraid of me.			.809	
I appear smart.			.724	
I prefer to choose some of the pupils to answer questions.			.640	
I involve both males and females equally in the teaching and learning process.	.506		.606	
I leave the class early before the lesson ends.			.580	-.412
I provide the tests every week.				.674
My pupils wish to become like me.				.607
I use different materials such as maps, drawings, pictures, radio, TV or other materials in the teaching and learning process.				.563
I help pupils who have not understood well the lesson by teaching them alone through remedial classes.	.451			.527
I provide tests every month.				.418
Eigen values	5.605	2.940	1.620	1.464
Percentage of variance	21.556	11.307	6.230	5.629

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization

The findings in Table 1 show that the PSS is a four-factor self-response scale intended to measure the teaching suitability. It was originally tested with primary school teachers in

Tanzania but it can also be used with teachers in different levels of education. The referred findings also show that it is valid and effective in measuring the teachers' professional suitability.

Reliability of the PSS

The reliability of the PSS was checked by calculating Cronbach's alpha coefficients, which constitute an index that show internal consistence of the instruments (Field, 2009). The items in the PSS were found to have an internal consistency of Cronbach's alpha coefficient of $\alpha = .79$. The Cronbach's alpha coefficients for social suitability items were $\alpha = .79$ (7 items), practical suitability were $\alpha = .69$ (7 items), personal suitability were $\alpha = .74$ (5 items) and ethical suitability were $\alpha = .64$ (5 items). Although the internal consistency for practical and ethical suitability did not reach the Cronbach alpha coefficient of 0.70, the total scale for suitability reached the Cronbach alpha coefficient of $\alpha = .79$. These were considered to have acceptable reliability for the suitability instrument used (Field, 2009; Pallant, 2011). These findings indicate that the PSS is reliable in measuring the teachers' professional suitability.

Scoring Teachers' Suitability using TPSS

The teachers' professional suitability was obtained by summing up the teacher's scores and the six rating pupils' scores. The total was then divided by seven. The actual scores obtained by the respondents ranged from a minimum of 65.71 to a maximum of 124.86 with a mean of 102.46 and a standard deviation of 11.47. The scores were then categorized into three groups namely; low suitability (≤ 84), moderate suitability (84.01 - 106.86) and high suitability (106.87+).

Scoring Teachers' Suitability using Teachers' Observation Protocol (TOP)

After observation of the classroom sessions, the points scored by each of the two Juries were discussed for an agreement. The difference in the scores was small, such that it was fair to calculate the mean as an agreement for the scores as shown in Table 2. The Cohen's Kappa Measure of Agreement was moderate.

Table 2: The Judgments on Fostering Thinking Skills using the Teachers Observation Protocol

Timing of Fostering	Juries' Coding	The Coded Thinking Skills Fostered			
		Divergent thinking	Convergent Thinking	Metacognitive thinking	Total Scale
First minutes	Researcher	10	3	2	15
	Jury 1	12	4	2	18
	Jury 2	11	5	2	18
	Average	11	4	2	16
11-20 minutes	Researcher	10	5	5	20
	Jury 1	9	4	6	19
	Jury 2	11	3	4	18
	Average	10	4	5	19
21-30 minutes	Researcher	24	8	9	41
	Jury 1	23	8	7	38
	Jury 2	25	8	8	41
	Average	24	8	8	40
31-40 minutes	Researcher	21	9	12	42
	Jury 1	22	11	12	45
	Jury 2	23	10	12	45
	Average	22	10	12	44
Total fostering	Researcher	65	25	28	118
	Jury 1	66	27	27	120
	Jury 2	70	26	26	122
	Average	67	26	27	119

Teachers' suitability in terms of their ability to foster divergent thinking, convergent thinking, and metacognitive skills to students as observed using TOP was confirmed such that the variations were recorded from low performing to high performing schools. It was found that there was a statistically significant difference for teachers in high performing schools ($M = 59.2, SD = 26.8$), and teachers in low performing schools ($M = 21.1, SD = 15.6$); $t(34) = 18.21, p = .000$ (two tailed) in fostering divergent thinking in the classroom. This implies that teachers

in high performing schools demonstrated higher ability in fostering divergent thinking skills than teachers in low performing schools.

Results further reveals a statistically significant difference between teachers in high performing schools ($M = 27.1, SD = 1.8$), and teachers in low performing schools ($M = 11.3, SD = 6.5$); $t(34) = 17.33, p = .000$ (two tailed) in fostering convergent thinking in the classroom. This means that teachers in high performing schools demonstrated higher ability in fostering convergent thinking skills than their counterpart teachers in low performing schools.

Lastly, there was a statistically significant difference between teachers in high performing schools ($M = 30.6, SD = 18.4$), and teachers in low performing schools ($M = 9.6, SD = 6.7$); $t(34) = 15.82, p = .000$ (two tailed) in fostering metacognitive thinking in the classroom. Meaning that teachers in high performing schools demonstrated higher ability in fostering metacognitive thinking skills than their counterpart teachers in low performing schools.

Teachers' Professional Suitability by Regions

Table 3 indicates the variation in the level of professional suitability by regions from low suitability of 9.3 percent in Dodoma Region to 5.8 percent in Dar es Salaam Region while the overall low suitability was 7.7 percent. High level of suitability also varied from 27.9 percent in Dodoma Region to 47.8 percent in Dar es Salaam Region with an overall high suitability of 35.8 percent. However, the findings from the Chi-square did not indicate statistically significant difference $\chi^2(6, n = 360) = 10.21, p = 0.116$, in professional suitability by regions.

Table 3: Professional suitability by regions

Level of suitability	Regions									
	Dodoma		Tabora		Kilimanjaro		Dar- es- salaam		Overall	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Low suitability	8	9.3	6	6.1	10	8.9	4	5.8	28	7.7
Moderate Suitability	53	61.6	57	58.2	54	48.2	29	42.0	193	52.9
High suitability	24	27.9	30	30.6	44	39.3	33	47.8	131	35.9

Total suitability	85	98.8	93	94.9	108	96.4	66	95.7	352	96.4
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Table 4: Teachers' Professional Suitability by School Ownership

Level of Suitability	School Ownership					
	Government Schools		Religious Schools		Private Schools	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Low suitability	28	10.4	-	-	-	-
Moderate suitability	158	58.7	14	48.3	14	38.9
High suitability	73	27.1	13	44.8	21	58.3
Total Suitability	259	96.3	27	93.1	35	97.2

Table 4 indicates that the level of professional suitability in the government schools was as low as 10.4 percent while low professional suitability in private and religious schools was not recorded. High level of professional suitability also varied from 27.1 percent in government primary schools to 58.3 percent in private primary schools. The findings from the Chi-square indicated that there was a statistically significant difference $\chi^2(4, n = 352) = 14.515, p = .01$ in professional suitability by the type of school ownership.

Discussion

The findings showed that the PSS is effective in measuring the teachers' professional suitability. The validity which is considered as the extent to which an instrument measures what it was intended to measure and not something else (Petty et al., 2009) has indicated that the PSS was valid and it accurately measured the professional suitability of teachers. On the other hand, the reliability which is the extent to which a measure yields the same number or score each time it is administered when the construct being measured has not changed (Cacioppo & Petty, 1982) indicated that the PSS was reliable. This was indicated by the internal consistency of $\alpha = .79$.

Based on the validity and reliability of the results, the PSS provides promising potential for assessing the teachers' professional suitability. The PSS comprises four factors namely;

social, practical, personal and ethical suitability. Considering that the professional suitability is usually linked to professional standards and codes of practice (College of Educational Therapists, 2010), assessing those who aspire to become teachers is of paramount importance. The current findings imply that the PSS should be used in recruiting the teachers. Although replication for these results is important, the study findings have laid a foundation for future studies on the effectiveness of PSS in assessing the teachers' professional suitability.

Given the fact that the learners' quality learning depends partly on learners' characteristics, history, and the quality of instruction (Bloom, 1976; Joshua, 2021), it is essential to note that both policy makers and researchers should understand the effective tool that may be useful in determining quality of instruction. The quality of instruction may be demonstrated by the teachers as they interact with their students in teaching-learning sessions and outside the classroom. Currently, there is a growing concern in Tanzanian society on the quality and professional suitability of some teachers. It is important for the governments, employers and researchers to demonstrate the fact that recruiting teachers who are suitable for the teaching profession is vital to raising education standards among learners.

Regarding the PSS' ability to discriminate individual differences in teaching profession suitability, the teachers in government schools did not differ significantly in terms of professional suitability. However, the significant difference was observed between the teachers in government schools and their counterparts in private schools. Some explanations are presented below to justify the above assertion. First, given the fact that all teachers in the government primary schools received similar training in the colleges using the same preparation curriculum, the teachers' practices in the classroom context might also be similar. Second, since the development of the PSS has drawn much of its characteristics from the standards advocated by the Teacher Education Development and Management Strategy 2007/2008 - 2010/2011 (MoEVT, 2007), one might assume the discrepancy between these standards and pedagogical content in the curriculum used to prepare the teachers in the colleges. Third, the teachers in private primary schools are recruited among the qualified teachers from the similar training colleges although the recruitment sometimes involve the teachers from other colleges outside Tanzania. This might partly explain their differences in the observed suitability. Further, the difference might be attributed to external factors. For example, teachers in government schools reported lack of housing facilities, low pay, lack of in-service trainings and school management problems. All those factors might have affected their teaching professional suitability.

While the findings showed that the PSS instrument is valid and reliable, its generalizability needs to be taken cautiously. This is due to the fact that the PSS has been tested among primary school teachers in Tanzania where the teachers are selected to join the teaching profession based on academic performance only. With such context in mind, the PSS instrument has a potential for the generalizability in all other countries whereby the teachers are recruited for the teaching profession based on academic performance only. However, the PSS instrument needs to be tested in other contexts where the teachers are recruited for the teaching profession based on other criteria.

Conclusions and Recommendations

This study evaluated the effectiveness of the professional suitability scale in assessing the primary school teachers' suitability for the teaching profession in Tanzania. Considering the structure, validity and reliability of PSS in assessing professional suitability of primary school teachers in Tanzania, the conclusion is warranted that the PSS is an effective tool. This is supported by our control observational method using TOP. PSS was also partly effective in measuring difference in professional suitability between teachers in private and government schools.

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