Development and Validation of Teacher Disposition Scale among Student-Teachers in Selected Public Tertiary Institutions

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(Corresponding Author)

Oyeronke Christiana Paramole[1]
Taofik Olatunji Bankole[2]
Timothy Olumide Okunoye[3]

[1]*Department of Educational Foundations and Counselling, Faculty of Education, Obafemi Awolowo University, Ile-Ife, Nigeria.*
Email: olaronkus27@yahoo.com Tel: +2347036661152
[2]*Department of Demography and Social Statistics, Faculty of Social Sciences, Obafemi Awolowo University, Ile-Ife, Nigeria.*
Email: oluwabamikoleolatunji@gmail.com Tel: +2348096574072
[3]*Department of Arts and Social Sciences, Faculty of Education, Obafemi Awolowo University, Ile-Ife, Nigeria.*
Email: tim.okunoye@gmail.com Tel: +2348068127092

ABSTRACT

The study developed a Teacher Disposition Scale (TDS) and determined the reliability of the scale. It estimated the validity of the scale and investigated the factor structure. There was a dearth of studies in Nigeria that have provided insight into to providing information on items that should be appropriate to measure the disposition of students-teachers towards the teaching profession. Hence, this study addresses this gap in literature. The study adopted the cross-sectional and descriptive design method. Information was sourced from a total sample size of 600 respondents from four purposefully selected public tertiary institutions in Osun, Nigeria. The adopted the simple random technique in the selection of respondents. The research instruments used were Teacher Disposition Scale (TDS) and Teachers Effectiveness Scale (TES). The results showed that the reliability of the TDS using Cronbach's alpha was r=0.908 ($p<0.05$) Spearman Brown r=0.838 ($p<0.05$) and Guttmann Coefficient r=0.824 ($p<0.05$). The results further showed that the Kaiser-Meyer-Olkins (KMO) was 0.778, an indication that the items were suitable for exploratory factor analysis with convergent validity of 0.783 ($p<0.05$). Also, the items when subjected to Principal Component Analysis (PCA), yielded six components with Eigen values greater than one at 71.7% of the total scale variance. The study concluded that the TDS developed in this study was a valid and reliable instrument that could adequately measure the disposition of secondary school teachers towards the teaching profession in Osun State, and could serve as an important component in teacher preparation, performance and recruitment.

Keywords: *Disposition, Exploratory factor analysis, Validation, Scaling, Reliability.*
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Highlights of this paper

- This study provides a basis for the determination of the suitability or otherwise of the teacher education programmes as currently run by the colleges of education and universities.
- The study addresses the dearth in literature by developing and validating teacher dispositional scale among teacher-students across universities and colleges of education in Osun State, Southwest Nigeria.
- The procedure followed in this study could be used as a guide in the development of similar psychological scales. Also, the TDS can be used to provide information on the ethical behaviour and code of conduct of would be teachers as well as identify factors underlying the components of teacher disposition and provide a framework for improving student-teachers' ethical behaviour and code of conduct to the teaching profession.

1. INTRODUCTION

Teachers are the most imperative tool in refining schools and contributing to student accomplishment (Morgado *et al.*, 2018). In line with this empirical assertions, teachers are typically considered as important mechanism or tool or factor in Education, as they are the providers and facilitators of teaching and learning in schools (Ilgan *et al.*, 2015). In fact, teachers have quite a lot of responsibilities in schools concerning both classroom and other related deeds which make knowledge sharing wholesome for learners and build in them best possible intellectual, social, physical and emotional capabilities (Carvalho and Chima, 2016). In regard to this, the amount of quality possessed by teachers may determine the extent and quality of knowledge and skills that will be passed on to the learners (Ilgan *et al.*, 2015). Thus teacher's quality could be measured in relation to content knowledge, instructive skills and dispositions while teacher's education provides a significant nursery for quality teachers (Putman, 2013).

Alem *et al.* (2016) refer to effective teachers as ones who set high, convincing goals, presented evidence in ways to meet student necessities, examined student development, and providing opportunities for students to apply what they had been taught over a span of time. Equally, effective teachers were described by Salve-Opina (2014) as individuals who had distinct standards for classroom behaviour, vibrant and attentive instruction, employed operative interrogative techniques, providing response, and using a variety of assessment strategies. In addition. Similarly, Faleye and Awopeju (2012) described teachers as caring individuals, who had developed positive interactions with their learners or students.

Teaching in Universities, Polytechnics, and tertiary institutions in general involves varied modes of instruction such as lectures, seminars, laboratory and mentoring. Disciplines, courses of study and instructors also differ extensively in their emphasis on such diverse educational goals such as learning innovative knowledge, motivating or inspiring student's interest, developing reasoning skills, and leading learners to question established tenets (Erdogan and Marcinkowski, 2015). For instance, Eryılmaz (2017) recognise one critical distinction in determining effective teaching may be the virtual importance of cognitive and affective goals. Thus, some qualities of teaching may be more strongly connected to such cognitive goals as knowledge and skills, while other qualities are more strongly linked to affective objectives as fostering student's interest and curiosity (Karabiyik and Mirici, 2018).

Over the years, studies have established a very strong link between teacher dispositions and the development of students cognitively (Waltner *et al.*, 2019). Imperatively, teacher preparation programmes must be developed in such a way that should be able to enable teachers to develop the obligatory dispositions to be effective educators (Erdogan and Marcinkowski, 2015). The professionalisation of the teaching job remains one of the few approaches that could be adopted to assessing knowledge and skills impaction but also to determining whether or not an individual, that is, the teacher was the right match for the classroom job, thus the reinforcement of dispositions (Singh and Kaur, 2019).

On the other hand, scaling is the branch of measurement, and it involves the construction or development of an instrument that associates qualitative constructs with quantitative metric units (Huang *et al*., 2017). According to Erdogan and Marcinkowski (2015) and Wasicsko (2004) scaling emanated out of efforts in psychology and education to measure the so termed "unmeasurable" constructs which include but not limited to authoritarianism and self-esteem. In many ways scaling remains one of the very few of unfathomable and misinterpreted aspects of social research measurement. Invariably, scaling attempts to do one of the most problematic aspect of research tasks, thus, trying to measure abstract concept (Morgado *et al*., 2018).

Also, scaling involves a high degree of operationalization, and it allows researchers to determine, quantify or measure the extent of complexity of concerned issues or subjects (Sania and Feza, 2018). Equally, scaling enables researchers to aggregate standards of several variables into one score and this is with a comparatively high degree of reliability (Oladimeji, 2016). Usually, scaling offers respondents a choice of preference out of given sets of options, which, also are recognized in a very careful but cumbersome way (Rike and Sharp, 2008; Rodríguez-de-Dios *et al*., 2016). Imperatively, scaling methods are used when a number of observations are to be of utilised concurrently on each response. The individual items of the observation do not matter; what really matters is the total score (Morgado *et al*., 2018).

The technical hitches of the scaling process can be alienated into three categories; the first is to agree what are the suitable terms, ensuring that they are logically related and they refer to the same attitude dimension, which between them they distance adequately; the second is to appropriate the terms together into a meaningful unabridged; and the third is to task the properties, particularly the reliability and validity, of the scale that was constructed (Collinson *et al*., 1999).

In spite of the importance of validation development and validation of research instruments, particularly among student-teachers that are at the formative stage of their teaching career, previous studies addressing notable shortcomings in the Nigeria have focused primarily on effectiveness of teaching in relation to already employed teachers with focus on their level of education, job performance, plans for retirements (Adeniji, 2016; Oladimeji, 2016; Adeyemo and Olatomide, 2017) rather than capturing teachers' disposition. Also, there is a dearth of studies that focused on the development and validation of student-teachers disposition across all categories higher institutions of learning in the country. Thus, previous studies have focused their work either at university level or any other type institutions of learning in the country at a point in time (Faleye and Awopeju, 2012; Diyan and Adediwura, 2016; Adeyemo and Olatomide, 2017).

This study addresses these gaps in literature by developing and validating teacher dispositional scale among teacher-students in four purposefully selected public tertiary institutions in Osun State, Southwest Nigeria. From the literature, the present study was therefore designed to develop the teachers' disposition scale. Such a study is important because its result could provide empirical basis for the evaluation of the disposition of teachers admitted in colleges of education and universities. Findings from the study might provide a basis for the determination of the suitability or otherwise of the teacher education programmes as currently run by the colleges of education and universities. Furthermore, it is believed that result of this study bearing on the topic will be of great importance to stakeholders in the education industry on the decision to employ graduates from the colleges of education or universities.

In order to realise the broad objective of this study effectively, the following research questions were raised: What items will be adjudged to measure teacher disposition? What is the internal consistency reliability of the teacher disposition scale? Does the scale possess construct and convergent validity? What is the factor structure of the scale?

2. METHODOLOGY

The study was conducted using a descriptive and cross-sectional survey design. The population for the study comprised final year student-teachers in public tertiary institutions in Osun State. The four public tertiary institutions were: Faculty of Education, Obafemi Awolowo University, Ile-Ife; Faculty of Education, Osun State University, Ipetu- Ijesha; College of Education, Ila Orangun, and College of Education, Ilesa. The sample for the study consisted of 600 respondents. These comprised final year students, because they have had at least a year of teaching practice experience. One hundred and fifty students were selected from each of the two Faculties of Education (Obafemi Awolowo University and Osun State University of Education) and the two Colleges of Education (Osun State College of Education Ilesa and Osun State College of Education Ila) using simple random sampling technique. From each of the Universities and Colleges, Five Departments with more than 50 students were purposively selected. From each Department, 30 students were randomly selected.

Two research instruments were used for the study. The first instrument was titled "Teacher Disposition Scale". It was developed from the hypothesized subscales and the literature. Items were generated to measure the disposition of student teachers to teaching. The initial items generated were 40. The items were subjected to qualitative moderation by expert judgement, leading to a reduction to 36 items. This was followed by pilot study on the generated items. To this end, 30 students were randomly selected from a group of final year students in a College of Education which were not part of the institutions used for the main study. This was to ascertain the general suitability of the 36 items. The pilot study was also used to determine the initial reliability of the instrument r= 0.74 of the instrument.

The scale consists of two sections; Section A consists of respondents' personal data, such as sex, age, level and marital status. Section B of the scale elicited information on the several aspects of teacher disposition, which includes Attitude, Habits, Professional Ethics, Values, Commitment and Interest. Each item has five response alternatives from which the respondents were expected to tick the best option that they considered appropriate to describe their disposition. The five-point Likert scale was rated strongly agree (5), agree (4), disagree (3), strongly disagree (2), and can't say (1) was chosen as response formats as it offers differing patterns of possibilities within a population.

Afolabi (2012) affirmed that validity can be evidenced by examining the content of a test for sampling adequacy of the items; that is, to ensure that the test adequately represents the desired conceptual domain. The second instrument was the Teacher Effectiveness Scale (TES). The TES, which served to ascertain the convergent validity of the TDS, consisted of 20 items. It was developed by Faleye and Awopeju (2012) and has reported psychometric indices of reliability and validity of 0.98 and r=0.52 respectively.

The consistency of student teacher ratings was estimated for the total scale on the TDS by computing Cronbach's alpha coefficient = 0.909. Convergent evidence was established when positive correlation existed between scores on the TDS and TES r= 0.783. The questionnaires were administered by the researcher with the permission of the course coordinators (and the receipt of willingness to participate by those involved through informed consent) in the five departments selected for this study. At the beginning of each administration, students were told of the purpose of the study and given the TDS questionnaire. The researcher distributed 600 questionnaires by hand with the assistance of the class representatives. After completion, 735 questionnaires were retrieved, upon examination of the responses, 589 valid cases were observed, and 6 were rejected as they were not properly completed.

The consistency of students' ratings was estimated for the total scale on the TDS by computing Cronbach's alpha coefficient. Convergent evidence was established when positive correlation existed between scores on the

TDS and TES. Confirmatory factor analysis was computed to determine the inter-correlation among the items on SETERS and to determine how much each item contributes to each factor and the total measurement instrument.

3. RESULTS

3.1. Research Question One

What items of the scale will be adjudged to measure teacher disposition. This objective is achieved by plotting the items which satisfy the TDS with the scale descriptive statistics.

Table-1. Preliminary items on Teachers Disposition Scales (TDS).

S/N	Items
1.	Appreciate students contribution even when the responses are not correct
2.	Prepare lessons from a variety of source
3.	Recognize the personnel and family diversities in pupils/student
4.	Recognize that students typically bring some knowledge to each other's lesson
5.	Respect the privacy and confidentiality of all students and their families
6.	Value working with other school staff to improve student's learning
7.	Committed to the teaching profession
8.	Committed to continually improving my knowledge in my area of specialization for the benefit of my students
9.	Value and see potential in each student
10.	Value and promote hard work among students
11.	Give students prompt feedback
12.	Sensitive to the feelings of others
13.	Give students prompt feedback
14.	Prompt in running any work assigned to me
15.	Maintain professional boundaries with students
16.	Dress neatly and decently
17.	Have high expectations for all students
18.	Attend classes punctually
19.	Welcome the input/assistance of fellow teachers in my lesson where this is needful
20.	Assist less interested or weak students to do well in school
21.	It is my responsibility that students demonstrate adequate understanding of the topic taught
22.	A well prepared lesson note is a pre-requisite to effective lesson delivery
23.	Students' grade are best used to promote learning
24.	Prevents students from promoting each other's learning
25.	Will remain a teacher pending the time I get a better job
26.	Ignore other non-teaching responsibilities in the school
27.	Complain about every problems of students and not proffer solutions
28.	Bored by students' questions
29.	Does not communicate effectively with the students
30.	I am not prepared to go the extra mile to promote students' learning and performance
31.	I feel comfortable to miss my lessons
32.	It is right for me to be reminded of my lesson
33.	It is not necessary I listen to students, whatever they say
34.	It is acceptable for me to come to class unprepared
35.	A teacher should bring personal problems to class
36.	It is right for me to use foul or profane language in the school

Analysis reveals that some items actually have means greater than the scale mean. This is momentarily used to mark the credibility of the items to the Teacher's Disposition Scale Table 1. Nineteen items for Teachers' Disposition Scale have mean above scale mean, the items are 1, 2, 3, 4, 7, 8, 10,15, 17, 21, 26,27, 28, 29,30,33,34,35 and 36. The remaining 17 items are lower than scale mean they are 5,6,9,11,12,13,14,16,18,19,20,22,23,24,25,31 and 32.

The inter relationship between 36 items of TDS showed that the relationship between items were high, this was as a result of measuring teachers disposition under different sub scale. The item total correlation of the 36

items in the scale were conducted, Item 30 had the highest Cronbach-alpha if item deleted value of 0.909, followed by item 35 with Cronbach-alpha 0.896 and item 4 with Cronbach-alpha 0.894.

The 36- items scale was subjected to four criteria to determine the items which measure the constructs adequately. They are as follows:

i. Before running the first Exploratory Factor Analysis, the items were screened. Items with mean less than scale mean (MLSM) of 3.797 were deleted.
ii. Items with low inter-item correlation (LITC) that were below item total correlation mean (ITC) of 0.211 were deleted.
iii. Items with Cronbach-alpha if item deleted higher than scale Cronbach-alpha 0.892 were deleted.
iv. Altogether, the items affected by these three conditions, numbered eight, but deletion of the items were delayed, until the subscale reliabilities were conducted for the scale.

In order to determine the final scale items, only items that were affected by at least two of the reduction criteria were deleted. Thus, the items identified by these criteria were items 4, 9, 12, 14, 19, 25, 30, and 35. However, the reliability analysis had to be carried out on each of the sub-scales to ascertain if these items or more needed to be deleted. The deletions of items were, therefore left until the subscale reliabilities were done. A total of 23 items were retained after the subscale reliabilities were conducted. Thus, the final scale had items, which were considered to have relatively superior psychometric qualities.

3.2. Research Question Two

What is the internal consistency reliability of the teacher disposition scale? To determine the internal consistency reliability of TDS, Cronbach's alpha and split-Half analyses were performed on the 36 items of TDS. The reliability analysis of each sub-scale was conducted. This led to the deletion of items, which were considered not suitable to measure the construct. The results showed that TDS has a Cronbach alpha coefficient of 0.892 and Guttmann split-half reliability coefficient of 0.824 and Spearman Brown 0.838. These results, however, are psychometrically satisfactory as opined by Devells (1991) as cited by Afolabi (2012). Reliability tests result of 0.50 or below is a questionable. Since this result is 0.5 and above the analysis simply reveals that these items should contribute heavily to the Teacher's Disposition Scale and can be considered reliable.

Table-2. Reliability of the Teacher's Disposition Scale.

Reliability type	36	23
Cronbach's alpha	0.892	0.908
Spearman brown	0.838	0.863
Guttmann coefficient	0.824	0.876

Table 2 reveals various methods of internal consistency reliability check which were obtained from Reliability analyses conducted on the scale. Both on the initial 36 items and the new 23 items. The widely-accepted social science cut-off is that alpha should be 0.70 or higher for a set of items to be considered a scale, but some use 0.75 or 0.80 while others are as lenient as 0.60. The coefficients are the basic tool used to explain the reliability which shows that the internal consistency using Cronbach's Alpha, Spearman Brown and Guttmann Coefficients reliability test are approximately 0.908, 0.863 and 0.876 respectively. These results, however, are psychometrically satisfactory as opined by Devells (1991) as cited by Afolabi (2012). Reliability tests result of 0.50 or below is a questionable. Since this result is 0.5 and above the analysis simply reveals that these items should contribute heavily to the Teacher's Disposition Scale and can be considered reliable Table 3.

Table-3. Teacher disposition sub-scales reliability.

Sub-Scale	Cronbach-alpha	No of items
Attitude	0.820	5
Habits	0.709	5
Professional ethics	0.874	7
Commitment	0.747	3
Interest	0.728	3

The widely-accepted social science cut-off is that alpha should be 0.70 or higher for a set of items to be considered a scale, but some use 0.75 or 0.80 while others are as lenient as 0.60. The criteria set for item deletion in this study was based on Cronbach's alpha and item-total correlation. Subscales with Cronbach's Alpha of less than 0.6 were considered unreliable (Lan and Rainey, 1992).

The sub-scale "value" was totally dropped because three of its items were affected by the reduction rules and the remaining three items have low sub-scale reliability of 0.347.

Table-4. Sub- scale inter-item correlation matrix.

Sub-scale	Habit	Attitude	Interest	Commitment	Value	Prof. Ethics
Habit	1.000					
Attitude	.351	1.000				
Interest	.220	.344	1.000			
Commitment	.495	.106	.090	1.000		
Value	.147	.266	.159	.268	1.000	
Professional ethics	.011	.282	.035	.122	-.042	1.000

However, as presented above Table 4 describes that Barlett's test of sphericity tests the hypothesis that the correlation matrix of the Sub-Scale is an identity matrix; (i.e. all diagonal elements are 1 and all off-diagonal elements are 0) implying that all of the variables are correlated. Since the significant value for this test is less than the significant value (0.05), it will then be concluded that there are actually correlations in the sub-scale of Teacher's Disposition.

3.3. Research Question Three

Does the scale possess construct and convergent validity? A reliable measure that is measuring something consistently is not necessarily measuring what you want it to be measuring. While this holds, a lack of reliability automatically places a limit on the overall validity of a test. The data collected was subjected to Kaiser-Mayer-Olkin (KMO) measure of sampling adequacy test to determine the appropriateness of factor analysis for these data. For these data, the KMO value is 0.96, hence, factor analysis is appropriate for the collected data.

The convergent validity of the Teachers Disposition Scale (TDS) with Teachers Effectiveness Scale (TES) was correlated using mean score and standard deviation score.

Table-5. Correlation between the scores on TDS and TES.

Scales	X	SD	r	p-value
TDS	136.9715	9.5802	0.783	0.02***
TES	81.730	6.476		

Note: ***Correlation is significant at 0.05 level.

The result suggested that there is significant correlation between the two instruments at the 0.05 level of significance where correlation coefficient r was 0.783 and p=0.02. Hence, there was a positive relationship between scores on TDS and TES Table 5. Thus, convergent validity evidence for scores on TDS was established.

3.4. Research Question Four

What is the factor structure of the scale?

Table-6. Eigen values and total scale variance explained by the factors on the teachers' disposition scale.

Component	Initial eigenvalues			Extraction sums of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	6.687	29.073	29.073	6.687	29.073	29.073
2	3.924	17.062	46.135	3.924	17.062	46.135
3	2.216	9.636	55.771	2.216	9.636	55.771
4	1.296	5.634	61.405	1.296	5.634	61.405
5	1.253	5.447	66.851	1.253	5.447	66.851
6	1.116	4.851	71.702	1.116	4.851	71.702
7	.902	3.922	75.624			
8	.821	3.569	79.193			
9	.676	2.938	82.130			
10	.635	2.761	84.891			
11	.592	2.573	87.464			
12	.522	2.268	89.732			
13	.403	1.752	91.485			
14	.350	1.521	93.005			
15	.288	1.250	94.256			
16	.252	1.097	95.353			
17	.238	1.033	96.386			
18	.216	.938	97.324			
19	.157	.682	98.006			
20	.142	.619	98.626			
21	.130	.565	99.191			
22	.101	.440	99.631			
23	.085	.369	100.000			

From the results presented in Table 6, 6 factors account for 71.7% total scale variance observed on Teacher's disposition. However, the scree plot is used to further confirm the number of factors on which items on Teacher's disposition scale would have factor loadings.

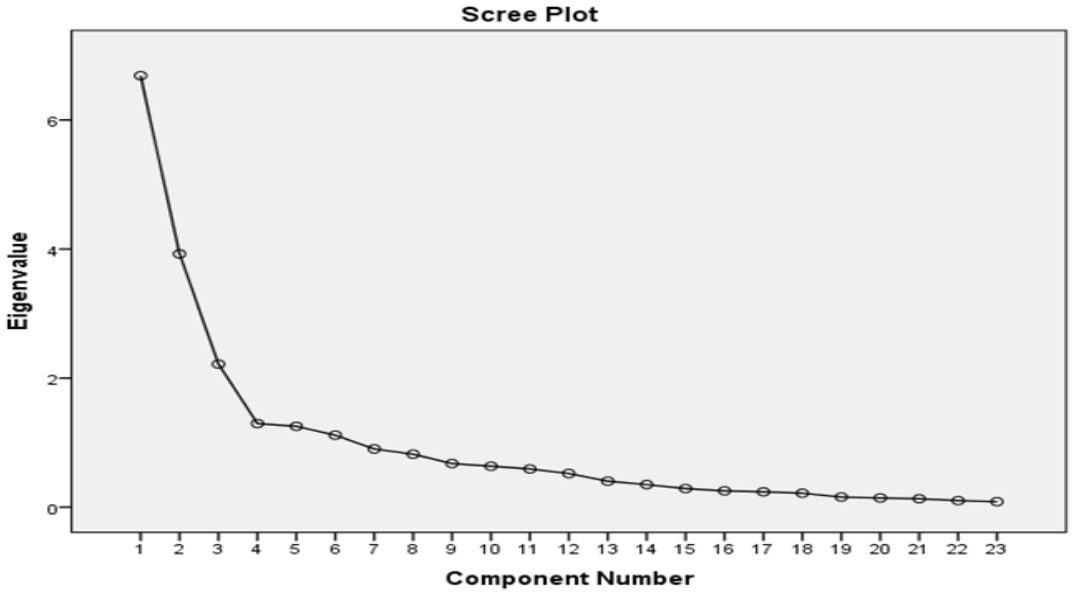

Figure-1. Scree plot showing eight factor loadings on teacher disposition scale.

The chart is showing the plot of Eigen values generated for the factor loadings of the items of Teacher's disposition scale Figure 1. The plot shows particularly six (6) factors with Eigen values greater- than- 1 stopping at

Eigen value of 6.68 in the upper left and descending part of the plot before the Eigen values start to level off parallel to the axis. Two factors with Eigen values on the steep axis of the plot before the Eigen value level off were retained. This is a method that frequently give criterion more accurate than the Eigen values greater-than-1 criterion.

The factorial composition of the scale was investigated using Principal Component Analysis PCA and Varimax Kaiser Normalization method on the two factors retained on the scree test Table 7.

Table-7. Rotated component matrix.

S/N	Component					
	1	2	3	4	5	6
1	-.153	.757	.106	.292	-.013	-.106
2	.065	.252	.344	.531	.255	-.379
22	-.019	.390	.048	.566	-.191	.035
6	.400	.688	.329	.190	-.151	.027
8	.210	.835	.154	.157	.073	-.037
10	.851	-.044	.165	-.106	-.054	.085
11	.818	.194	.162	-.002	-.040	.134
13	.696	.333	.282	.195	-.108	-.041
15	.184	.640	.431	-.074	.062	.090
16	.121	.243	.731	.080	.159	.115
17	.139	.168	.677	.256	.056	.061
18	-.016	.057	.654	.140	.496	.065
20	.720	-.114	.323	-.174	.035	-.066
5	.872	-.035	-.227	-.058	-.017	-.035
24	.545	.415	-.202	.472	.003	.268
26	-.147	.826	-.056	.061	.345	.137
28	.682	-.045	.023	.112	.268	-.285
29	-.157	.213	.287	-.128	.714	.246
31	.195	.010	.106	.080	.815	-.079
32	.579	.046	.231	.031	.158	.320
33	.151	.029	.201	.143	.089	.857
34	-.031	.083	.353	.771	.126	.203
23	.763	.150	-.260	.257	.042	.236

4. DISCUSSION

The analysis of data collected on the Teacher Disposition Scale (TDS) and Teacher effectiveness Scale among student teachers in Osun State showed that correlation coefficient between the scores on TDS and TES was high. The results indicated that ethical behavior and code of conduct explained 71.7 percent of the variance in the data. Then, internal consistency analyses were performed to assess the reliability of the two factors extracted from the confirmatory factor analysis. The ethical behaviour of a teacher is to accept personal responsibility for teaching students. Nevertheless, all teachers are to help foster civic virtues such as integrity, diligence, responsibility for human life others and self. Wasicsko (2004) found The Florida Studies examined which dispositions separated effective teachers from ineffective teachers. The findings could be classified into three categories: dispositions toward self, dispositions toward students, and dispositions toward teaching. According to Kohlberg (1984) the theories of moral development had significant impact on dispositions research. Stages of Moral Development explained how teacher Education programs influenced and enhanced student teacher dispositions. He suggested student teachers developed and comprehended moral or ethical situations in their classrooms through developmental schema (Kohlberg, 1984).

Ethical behaviour is a degree of positive or negative effect associated with some psychological object (Allen, 1983). Student teachers differ greatly in their behaviour and also differ in their methods to supply the pupil's

learning. There may be a definite relationship between teachers' behaviour to home background and their behaviour to what is termed as teaching readiness. Frequent changes are likely to develop indifferent behavior among teachers towards their profession (Tabatabaee-Yazdi *et al*., 2018).

The professional teacher accepts personal responsibility for teaching students character qualities that will help them evaluate the consequences of and accept the responsibility for their actions and choices. Nevertheless, it is believed that all teachers are obligated to help foster civic virtues such as integrity, diligence, responsibility, cooperation, loyalty, fidelity, and respect-for the law.

From code of conduct perspective, the code of conduct of teachers serves as a guiding compass as teacher seeks to steer an ethical and respectful course through their career in teaching and to uphold the honour and dignity of teaching profession. It is also used by the education community and the wider public to inform their understanding and expectations of the teaching profession. Code of conduct has an important legal standing and will be used by the Council as a reference point in exercising its investigative and disciplinary functions. The code of conduct of a professional teacher, in accepting his or her position of public trust, measures success not only by the progress of each student toward realization of his or her personal potential, but also as a citizen of the greater community of the republic.

Student teachers recognize their responsibility to create life-long learners, they also engage learners in exploration, critical and divergent thinking, and problem solving. They promote multiple and global perspectives in the activities they arrange. They use a variety of teaching strategies appropriate to learning goals. They individualize instructional procedures in keeping with the readiness of the learner. They believe that teaching involves using a variety of strategies and techniques, and assessment is the primary link between curriculum and instruction. They believe content and pedagogy are equally important.

Teacher Education Programme must model lifelong learning in ways that instil excitement of learning in students they are preparing to teach. According to Candy (1991) "Lifelong learning takes, as one of its principal aims, equipping people with skills and competencies required to continue their own 'self-education' beyond the end of formal schooling". One responsibility of teachers is to instil in others the ability to continue in the pursuit of knowledge independently. To accomplish this, students need to understand their own learning processes influence others and take responsibility for their own behaviour.

Teachers can facilitate learning by employing a repertoire of teaching strategies appropriate for use with their students. Good and Brophy (1994) described effective teachers as ones who set high, realistic goals, presented information in ways to meet student needs, monitored student progress, and provided opportunities for students to apply what they had learned. Effective teachers were described as those who had clear standards for classroom behaviour, clear and focused instruction, used effective questioning techniques, provided feedback, and used a variety of assessment strategies. In addition, effective teachers are those who had positive interactions with their students and who were caring.

5. CONCLUSION

In view of the findings of the study, it can be concluded that the 23- item TDS is reliable and valid for the measurement of teacher disposition. The scale is relevant to student-teachers in Universities as well as Colleges of Education, and thus has wide application to teacher education programme attended.

6. RECOMMENDATIONS

Based on the findings and conclusion of the study, the following recommendations were made:

i. Student teachers should be acquainted with both the concept of teacher disposition and the TDS early in their training. This will help them become increasingly aware of the dispositions of effective teachers and may be able to apply, observe, and reflect on these dispositions throughout the teacher preparation process.
ii. The TDS offers the opportunity for early self-assessment to help student teacher determine if teaching is an appropriate professional "fit". If not, additional support to teacher candidates to help them develop the dispositions of effective teachers could be made available.
iii. The TDS can be used to select or appoint school teachers at interviews, apart from its use of cognitive instruments to determine the minimum suitability threshold of prospective teachers in public and private secondary schools.

REFERENCES

Adeniji, K., 2016. Research, statistics and mathematics educators in Nigeria: Effect size perspective. AFRREV STECH: An International Journal of Science and Technology, 5(2): 24-36.Available at: https://doi.org/10.4314/stech.v5i2.3.

Adeyemo, E.O. and O.O. Olatomide, 2017. Validation of retirement adjustment scale for retired teachers of secdondary schools in Osun State, Nigeria. Journal of Psychological Studies, 7(2): 138-145.Available at: https://doi.org/10.5539/ijps.v7n2p138.

Afolabi, E.I., 2012. Tests and measurement: A tail bearer or true witness. An inaugural Lecture of the Obafemi Awolowo University, December, 2012. Available from https://oauife.edu.ng/news-events/item/224-344th-inaugural-lecture [Accessed 19/10/2019].

Alem, F., M. Plaisent, C. Zuccaro and P. Bernard, 2016. Measuring e-learning readiness concept: Scale development and validation using structural equation modeling. International Journal of e-Education, e-Business, e-Management and e-Learning, 6(4): 193-207.

Allen, L.E., 1983. Techniques of attitude scale construction. 1st Irvington Edn., Irvington Publishers.

Candy, P., 1991. . Self-direction for lifelong learning: A comprehensive guide to theory and practice. San Francisco, CA: Jossey-Bass.

Carvalho, J. and F. Chima, O., 2016. Development and validation of college level academic retention scale. American International Journal of Social Science, 5(3): 1-8.

Collinson, V., M. Killeavy and H. Stephenson, 1999. Exemplary teachers: Practicing an ethic of care in England, Ireland, and the United States. Journal for Just and Caring Education, 5(4): 340-366.

Devells, R., 1991. Classical test theory. MedCare, 44(11, suppl 3): 50-59.

Diyan, R.O. and A.A. Adediwura, 2016. Development of a rating scale for measuring teacher classroom autonomy in secondary schools in South-Western Nigeria. International Journal of Education and Practice, 4(4): 134-147.Available at: https://doi.org/10.18488/journal.61/2016.4.4/61.4.134.147.

Erdogan, M. and T. Marcinkowski, 2015. Development and validation of children's environment affect (attitude, sensitivity and willingness to take action) scale. Eurasia Journal of Mathematics, Science & Technology Education, 11(3): 577-588.Available at: https://doi.org/10.12973/eurasia.2015.1347a.

Eryılmaz, A., 2017. Initial development and validation of the positive teacher scale. Journal of Positive Psychology and Wellbeing, 1(1): 10–21.

Faleye, B.A. and A.O. Awopeju, 2012. The African symposium. A Revalidation of Students Evaluation of Teaching Effectiveness Rating Scale, 12(2): 18-29.

Good, T. and J. Brophy, 1994. Looking in classrooms. 6th Edn., New York: Harper Collins.

Huang, C.-H., T.-F. Wang, F.-I. Tang, I.-J. Chen and S. Yu, 2017. Development ... Development and validation of a quality of life scale for elementary school students. International Journal of Clinical and Health Psychology, 17(2): 180-191.

Ilgan, A., E. Aslanargun and S. Shaukat, 2015. Developing teacher professionalism scale: Validation and reliability study. Journal of Theory and Practice in Education, 11(4): 1454-1474.

Karabiyik, C. and I.H. Mirici, 2018. Development and validation of the foreign language learning effort scale for Turkish tertiary-level students. Educational Sciences: Theory and Practice, 18(2): 373-395.Available at: https://doi.org/10.12738/estp.2018.2.0010.

Kohlberg, L.A., 1984. The psychology of moral development: The nature and validity of moral stages. San Francisco: Harper & Row. Vol. 2.

Lan, Z. and H.G. Rainey, 1992. Goals, rules, and effectiveness in public, private, and hybrid organizations: More evidence on frequent assertions about differences. Journal of Public Administration Research and Theory, 21(1): 5-28.

Morgado, F.F., J.F. Meireles, C.M. Neves, A.C. Amaral and M.E. Ferreira, 2018. Scale development: Ten limitations and recommendations to improve future research practices. Psychology: Reflection and Criticism, 30(1): 3.

Oladimeji, A.B., 2016. Principles and methods of validity and reliability testing of questionnaires used in social and health science researches. Nigerian Postgraduate Medical Journal, 22(4): 195-201.

Putman, S.M., 2013. Measuring practicing and prospective elementary teachers' beliefs: Development and validation of the efficacy for classroom management scale. Alberta Journal of Educational Research, 59(3): 420-441.

Rike, C.J. and L.K. Sharp, 2008. Assessing preservice teachers' dispositions: A critical dimension of professional preparation. Childhood Education, 84(3): 150-153.Available at: https://doi.org/10.1080/00094056.2008.10522994.

Rodríguez-de-Dios, I., J.J. Igartua and A. González Vázquez, 2016. Development and validation of a digital literacy scale for teenagers. In F. J. García-Peñalvo (Ed.), Proceedings of the Fourth International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM'16) (Salamanca, Spain, November 2-4, 2016). New York, NY, USA. pp: 1067-1073.

Salve-Opina, A., 2014. The development and validation of online learning modules for college English. American International Journal of Contemporary Research, 4(2): 89-97.

Sania, K.R. and T.A. Feza, 2018. Time management behaviour: Scale development and validation. IOSR Journal of Business and Management, 20(3): 1-08.

Singh, K. and S. Kaur, 2019. Psychological empowerment of teachers: Development and validation of multidimensional scale. International Journal of Recent Technology and Engineering, 7(6S5): 340-343.

Tabatabaee-Yazdi, M., K. Motallebzadeh, H. Ashraf and P. Baghaei, 2018. Development and validation of a teacher success questionnaire using the rasch model. International Journal of Instruction, 11(2): 129-144.Available at: https://doi.org/10.12973/iji.2018.11210a.

Waltner, E.M., W. Rieß and C. Mischo, 2019. Development and validation of an instrument for measuring student sustainability competencies. Sustainability, 11(6): 1717.Available at: 10.3390/su11061717.

Wasicsko, M.M., 2004. The 20-minute hiring assessment: How to ensure you're hiring the best by gauging educator dispositions. School Administrator, 61(9): 40-42.