Validation of Modified Soft Skills Assessment Instrument (MOSSAI) for Use in Nigeria

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Abstract   Currently, it has become an accepted norm nearly all over the globe to teach and assess soft skills. However, in Nigeria, it is an emerging area of interest that needs to be addressed squarely. In the light of the fore-going, this study validated a modified version of Measuring and Assessment Soft Skills (MASS) (an instrument developed and used by twenty European researchers from five countries), for use in the Nigeria setting. It was administered on a randomly selected sample from the northern and southern parts of Nigeria. Survey design was used in the study. The 15-point instrument was administered on 600 participants each from the Northern and Southern parts of Nigeria with a total of 1,200 participants. This instrument also included method for teaching and assessing soft skills. Factor analysis was used to analyze the data in Section B of the instrument, mean and standard deviation for Sections C and D. The results show that the soft skills needed to enhance performances in workplaces are teachable and examinable in Nigeria. It was, therefore, recommended that examining bodies should consider adopting or adapting the instrument for use in the Sub-Saharan Africa.

Keywords   Soft Skills, Teaching of Soft Skills, Soft Skills Assessment, and Strategies for Assessing Soft Skills

1. Introduction

There is no doubt that there are skills and abilities necessary for success in life. Such skills and behavioural competences are often latent in nature, yet they are required to achieve success in life endeavours. Hence, the term "soft skill" is used to differentiate these skills and innate abilities from technical or hard skills which are learnt. Shakir [1] described soft skills as non academic skills in the form of leadership, team work, communication and life- long learning. Education Equals Economics (E3) Alliance [2] asserted that soft skills is a set of skills, abilities and traits that pertain to personality, attitude and behaviours rather than formal technical knowledge. Kechagias [3] expressed soft skills as intra and inter-personal or socio-emotional skills essential for personal development, social participation and workplace success. They include such skills as ability to

work on multi-disciplinary teams, effective communication, cultural awareness and expression, diligence, adaptability and honesty among others.

To Bunk [4], the typology of soft skills could be explained from three major perspectives. These include the capacity for social adaptation, disposition for cooperation, and team spirit. Nabi [5] classified soft skills into personal skills, communication skills and problem-solving skills. Crosbie [6] identified eight soft skills needed by the individuals in workplace which include collaboration/teamwork, communication skills, initiative, leadership ability, people development/coaching, personal effectiveness/personal mastery, planning, organizing and presentation skills.

Similarly, Kechagias [3] asserted that soft skills could be summarized into a series of twenty skills which are categorized into four general blocks: emotional self-awareness, self-management or self-government (self-control), social awareness (empathy), and management of social relations skills. These typologies were later reviewed by some scholars with a list of fifteen most important socio-emotional dimensions (of soft skills) which include: adaptability, assertiveness, emotional assessment of oneself and of others, emotional expression, emotional management of others, emotional regulation, low impulsiveness, the skills required to form relationships, self-esteem, self-motivation, social skills, stress management, empathy, happiness and optimism.

The importance of such skills in personal development for effective performance of one's task has necessitated the advocacy for the teaching and assessing of soft skills in a formal school setting. Gordon et al. [7] identified a range of rationales for focusing on soft skills development which include learner's empowerment, preparing worker for the labour market, supporting learner in becoming an effective citizen as well as an effective parent/family member to live respectively in a culturally diverse society and to promote environmental awareness. Interestingly, this underlying purpose affects the aim, teaching methods, power dynamics between teacher and learner, the areas to be assessed and how assessment is to be done.

Aworanti [8] opined that some forms of soft skills, that could be realized are inherent in every individual. As an individual, it is expected in a workplace to relate well with

others, be passionate to encourage others and handle various challenges. No wonder a lot of companies today do not only assess their current staff and future recruits on their business skills but are more interested in assessing them on the various aspects of soft skill competencies with a view to knowing the extent they relate and communicate with others. Incorporating soft skills into the school system, Lee et al [9] opined that the teacher needed to create a positive culture that would encourage students' learning achievement. Such classroom culture should be geared towards generating students' friendly relationships, appreciating students' achievements, creating interesting learning experiences and developing leadership and sense of duty among others

Kechagias [3] identified two different schools of thought in the teaching of soft skills. These are the 'generalists' and the 'specifists'. To the generalists, soft skills are seen as generic which can be taught separately from content and applied to any discipline. However the specifists believed that soft skills could not be taught as one-shot inoculation of skill development but to be embedded in each course or subject since knowledge is fundamentally situated. In consonance with these approaches, twenty European researchers (3 from UK, 5 from Greece, 4 from Sweden, 3 from Romania and 5 from Netherlands) described the teaching approaches as "Autonomous Teaching" or "Stand-Alone Approach" and "Intermixed Teaching" or "Embedded Approach".

A fifteen-item soft skills assessment instrument was developed by these twenty European researchers which later formed the basis for the assessment of soft skills in Europe. The fifteen-item soft skills assessment include: manners, ownership of tasks, attendance, motivation, professionalism, work output, conduct in workplace, time keeping, verbal communication, organization/planning, team working/respect, helping others, conscientiousness, ability to ask for help and adaptability/flexibility. It is obvious that what works in one place may not necessarily work in another, perhaps as a result of socio-cultural differences. This invariably, calls for adaptation, so that such thing can also work in a different setting, hence, the need of revalidation of instrument for use in Nigeria.

Statement of Problem

Despite the popularity of teaching and assessment of soft skills in the Western world, the integration of the concept of soft skills in African school setting is yet to be fully embraced. Some African scholars see soft skills as being innate to be taught and examined while others believed they are teachable but not examinable. Another impediment to the formalization of socio-emotional skills education is getting appropriate methods for the teaching and assessment of soft skills. This paper is aimed at seeking the stakeholders' views on the appropriate methods for teaching and assessing soft skills in Nigerian educational system. This paper, therefore, validated a modification of the instrument developed by the European researchers for the measuring and assessment of soft skills (MASS) in Europe and also investigated its usability in the Nigerian context.

Research Questions

To address the problem identified on MASS by some African educational researchers, the following two questions have been raised for this study:

1. What is the exploratory factor model of the Modified Assessment of Soft Skills Instrument (MOSSAI)?
2. Is the Modified Soft Skills Assessment Instrument (MOSSAI) adaptable to the teaching and assessment methods used in Nigerian Schools?

2. Methodology

The study was designed as a survey. The population of the study was made up of teaching personnel from both the private and public schools registered by the National Business and Technical Examinations Board (NABTEB), Nigeria. Multi-stage sampling technique was adopted in selecting 1,200 respondents for this study. Out of six geo-political zones in Nigeria, four were randomly selected that is, two geopolitical zones each from northern and southern parts. Two states were randomly selected from each of the four geopolitical zones. In each of the states, six schools of both public and private were randomly selected with 25 participants each. Thus, a total of forty-eight schools were used comprising thirty–five (35) technical schools (public) and thirteen (13) private schools with 825 and 375 participants respectively. Thus, there were 683 male teachers and 517 female teachers' altogether.

Instrumentation

Based on the 15-point Measuring and Assessment of Soft Skills (MASS) designed which formed the basis of the study (Appendix I for details), the researchers drafted 63 variables to form the Modified Soft Skills Assessment Instrument (MOSSAI) for the use in Nigeria (See appendix II for details). Section A of the MOSSAI has to do with personal data of the respondents in terms of name of school and gender. The 63 variables formed Section B of the new instrument for this study while Sections C and D focused on methods of teaching and assessing soft skills.

Analysis Procedure

The statistics employed for analysis of the data obtained from Section B of the instrument was Exploratory Factor Analysis (EFA) for validity coupled with Cronbach Alpha for reliability. The initial reliability of the 63 variables was 0.968 which underwent factor analysis process with orthogonal rotation to produce 5-factor model of 50 content areas for final version (See Appendix III for details) The reliability of the final version was 0.961.The names given to the subscales of the 5-factor model with their reliability coefficients are commitment to duty (0.908), attending to responsibilities (0.925), adaptability (0.901), resources management skills (0.801) and motivation (0.791). For Sections C and D of the MOSSAI, mean and standard deviation were used to analyze the responses of the respondents. Data from a mean of 2.5 and above were accepted while others below 2.5 were rejected.

3. Results and Findings

Research Question 1

What is the exploratory factor model of the Modified Soft Skills Assessment Instrument (MOSSAI)?

Table 1a. Table Showing the Communalities of the Extracted Factors

Variable	Initial	Extraction
var1	.560	.629
var2	.356	.330
var3	.402	.358
var4	.405	.364
var5	.457	.416
var6	.467	.466
var7	.398	.365
var8	.460	.460
var9	.426	.404
var10	.406	.384
var11	.593	.842
var12	.405	.396
var13	.500	.577
var14	.468	.566
var15	.432	.455
var16	.399	.334
var17	.508	.491
var18	.531	.466
var19	.535	.448
var20	.805	.864
var21	.443	.411
var22	.471	.384
var23	.535	.474
var24	.386	.337
var25	.463	.448
var26	.429	.389
var27	.516	.613
var28	.538	.586
var29	.411	.380
var30	.485	.514
var31	.500	.608
var32	.524	.566
var33	.465	.440
var34	.535	.566
var35	.628	.681
var36	.564	.576
var37	.579	.582
var38	.591	.592
var39	.513	.499
var40	.512	.448
var41	.507	.443
var42	.562	.542
var43	.546	.554
var44	.488	.538
var45	.552	.517
var46	.560	.554
var47	.539	.555
var48	.465	.466
var49	.582	.531
var50	.565	.526
var51	.588	.599

var52	.589	.647
var53	.531	.580
var54	.507	.493
var55	.579	.577
var56	.532	.550
var57	.521	.514
var58	.486	.469
var59	.525	.512
var60	.577	.590
var61	.623	.614
var62	.606	.555
var63	.812	.907

Table 1b. Kaiser-Meyer-Olkin (KMO) and Bartlet's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.965
Bartlett's Test of Sphericity	Approx. Chi-Square	40692.753
	Df	1953
	Sig.	.000

Table 1c. Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cummulative %	Total	% of Variance	Cummulative %	Total	% of Variance	Cummulative %
1	21.416	33.994	33.994	20.495	32.531	32.531	7.784	12.356	12.356
2	3.234	5.133	39.127	2.088	3.314	35.845	7.047	11.185	23.541
3	2.525	4.008	43.135	2.307	3.661	39.506	4.827	7.662	31.204
4	1.649	2.617	45.753	1.611	2.557	42.063	2.466	3.914	35.118
5	1.564	2.483	48.236	1.427	2.265	44.329	1.915	3.040	38.158
6	1.332	2.115	50.351	.978	1.553	45.882	1.791	2.842	41.000
7	1.295	2.056	52.407	.907	1.439	47.321	1.617	2.566	43.566
8	1.185	1.881	54.288	.833	1.322	48.644	1.549	2.458	46.025
9	1.123	1.782	56.070	.687	1.091	49.735	1.541	2.446	48.471
10	1.091	1.731	57.801	.641	1.018	50.753	1.332	2.114	50.585
11	1.044	1.657	59.458	.568	.902	51.655	.674	1.070	51.655
12	.966	1.533	60.991						
13	.934	1.482	62.473						
14	.858	1.363	63.836						
15	.832	1.321	65.156						
16	.807	1.281	66.437						
17	.791	1.256	67.693						
18	.745	1.183	68.876						
19	.713	1.132	70.008						
20	.703	1.116	71.124						
21	.699	1.110	72.233						
22	.691	1.096	73.330						
23	.652	1.035	74.365						
24	.629	.998	75.362						
25	.625	.992	76.355						
26	.603	.957	77.311						
27	.589	.935	78.246						
28	.576	.914	79.160						
29	.570	.905	80.065						
30	.550	.874	80.938						
31	.532	.844	81.782						
32	.522	.829	82.611						
33	.513	.814	83.425						
34	.494	.784	84.209						
35	.485	.770	84.979						
36	.483	.767	85.746						
37	.474	.753	86.499						
38	.472	.749	87.248						

39	.449	.713	87.961							
40	.438	.695	88.657							
41	.413	.655	89.312							
42	.409	.649	89.960							
43	.396	.628	90.588							
44	.390	.618	91.207							
45	.380	.604	91.810							
46	.374	.593	92.403							
47	.369	.585	92.989							
48	.347	.550	93.539							
49	.340	.540	94.078							
50	.330	.524	94.602							
51	.324	.514	95.116							
52	.321	.509	95.625							
53	.313	.497	96.122							
54	.299	.474	96.596							
55	.286	.454	97.050							
56	.282	.447	97.497							
57	.267	.423	97.920							
58	.263	.417	98.338							
59	.256	.406	98.743							
60	.245	.390	99.133							
61	.226	.359	99.492							
62	.215	.341	99.833							
63	.105	.167	100.000							

Extraction Method: Maximum Likelihood

Scree Plot
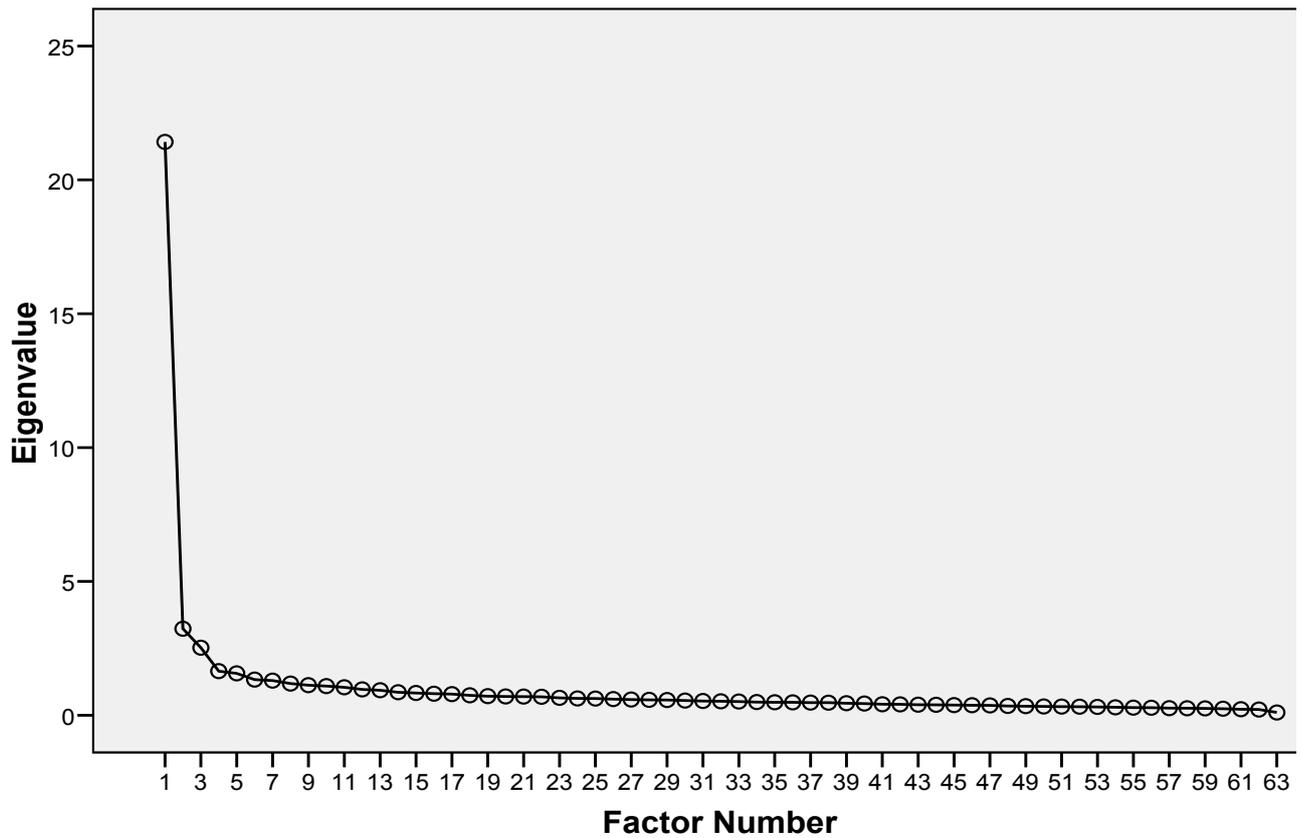
Figure 1.   The Scree Plot

Table 1d.   Table Showing the Rotated Factor Matrix

	Factor										
	1	2	3	4	5	6	7	8	9	10	11
var6	.626										
var8	.593										
var17	.589										
var23	.571										
var18	.567										
var19	.566										
var9	.564										
var5	.552										
var7	.547										
var2	.499										
var21	.494										
var10	.491										
var25	.490										
var3	.479										
var4	.465										
var22	.448										
var24	.446										
var16	.441										
var44		.661									
var43		.649									
var46		.629									
var42		.626									
var45		.622									
var47		.612									
var40		.546									
var41		.536									
var49		.533									
var48		.522									
var51		.478								.454	
var50		.466									
var37		.459					.437				
var38		.421									
var39		.403									
var55			.596								
var61			.596								
var60			.595								
var56			.587								
var57			.549								
var59			.547								
var54			.545								
var62			.526								
var58			.494								
var31				.720							
var32				.652							
var30				.608							
var33				.440							
var14					.636						
var13					.612						
var15					.476						
var12					.410						
var27						.682					
var28						.620					
var26											
var29											
var35		.420					.566				
var36		.432					.486				
var34		.420					.480				
var11								.841			
var1								.714			
var63			.412						.768		
var20									.746		
var52		.417								.544	
var53										.520	

Extraction Method: Maximum Likelihood   Rotation Method: Varimax with Kaiser Normalization
a. Rotation Converged in 8 Iterations.

Table 1e. Table showing factor loading for rotated factors, eigenvalues and percentage of the five-factor model in new MOSSAI

Item No	Factor					Final Communality Estimate
	1	2	3	4	5	
1	.63					.466
2	.59					.460
3	.59					.491
4	.57					.474
5	.57					.466
6	.57					.448
7	.56					.404
8	.55					.416
9	.55					.365
10	.50					.330
11	.50					.411
12	.49					.384
13	.49					.448
14	.48					.358
15	.47					.364
16	.45					.384
17	.45					.337
18		.66				.334
19		.65				.538
20		.63				.554
21		.63				.554
22		.62				.542
23		.61				.517
24		.55				.555
25		.54				.448
26		.53				.443
27		.52				.531
28		.48				.466
29		.47				.599
30		.46				.526
31		.42				.582
32		.40				.592
33			.60			.499
34			.60			.577
35			.60			.614
36			.59			.590
37			.55			.550
38			.55			.514
39			.55			.512
40			.53			.493
41			.49			.555
42				.72		.469
43				.65		.608
44				.61		.566
45				.44		.514
46					.64	.440
47					.61	.566
48					.48	.577
49					.41	.455
50					.64	.396
Eigenvalues	21.416	3.234	2.525	1.649	1.564	
Percentage of variance	33.994	5.133	4.008	2.617	2.483	

Table (1a) presents the Table of Communalities before and after extraction which indicates how much variance in each variable of this study is explained by the analysis. Table (1b) shows Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy. As a measure of factorability, the KMO is 0.965. The Bartlett's Test of Sphericity indicates that the data is probably factorable and it is significant ($p < .05$). Table (1c) depicts the total variance for factor solution in this study. The table presents the eigenvalues before extraction and after rotation to have sums of squared loadings and rotation sums of squared loadings respectively. In this study, the first eleven factors with eigenvalues is greater than 1 accounted for 51.7%. Figure (1) presents the Scree Plot which is the graph of how the eigenvalues coordinates with the factors. Table (1d) shows rotated factor matrix while Table (1e) presents factor loading for rotated factors, eigenvalues and percentage of the five-factor model in the new instrument (MOSSAI).

4. Discussion

Having considered the basic steps for retaining the reliable factors by means of eigenvalues, amount of total variance, scree plot, residuals and assessment of model fit in the Modified Soft Skills Assessment Instrument (MOSSAI), 11 variables have eigenvalues that exceeded the criterion value of 1.00. The feasibility of at least 70% of the total variability was not attained due to the sample size. However, the total variance accounted for was 51.7%. The Scree Plot at its sharp bent in relation to eigenvalues produced was inspected; the rotated factor matrix yielded a 5-factor result. As a function of factor analysis, the correlation coefficient between observed and reproduced coefficients determines the residual for achieving the fit of the model created by the factors. Due to the enlargement of the table of reproduced coefficient, the footnote produced by SPSS package shows that there are 48 (2.0%) non-redundant residuals with absolute values greater than 0.05. By implication, the model for this study has a good fit. The steps for retaining reliable factors validate Kerlinger et al. [10] and Mertler et al. [11] which stated that only those components (factors) whose eigenvalues are greater than 1 should be retained; they explained further that amount of total variance, the scree plot as well as residual for achieving the model fit are part of the essential factors for consideration.

The identified 5-factor in this study has been interpreted as commitment to duty, attending to responsibilities, adaptability, resources management skills and motivation for clarity and proper identification purposes.

Research Question 2

Is the Modified Soft Skills Assessment Instrument (MOSSAI) adaptable to the teaching and assessment methods used in Nigerian Schools?

Table 2a. Mean rating and standard deviation of methods of teaching soft skills

S/N	METHODS OF TEACHING SOFT SKILLS	MEAN	STANDARD DEVIATION	REMARK
1.	Direct instruction	2.52	.603	Accept
2.	Demonstration method	2.57	.574	Accept
3.	Lecture method	2.19	.747	Reject
4.	Discussion method	2.72	.699	Accept
5.	Simulation method	2.50	.625	Accept
6	Rote memorization	2.16	.759	Reject
.7.	Self discovery method	2.52	.656	Accept
8.	Questioning method	2.51	.639	Accept
9.	Interviewing method	2.54	.644	Accept
10.	Project approach	2.52	.661	Accept
11.	Mapping method	2.11	.688	Reject
12.	Cooperative learning	2.54	.622	Accept
13.	Reflection	2.51	.662	Accept
14.	Pictorial method	2.38	.681	Reject

Table 2b. Mean rating and standard deviation of methods of assessing soft skills

S/N	METHODS OF ASSESSING SOFT SKILLS	MEAN	STANDARD DEVIATION	REMARK
1.	Objective tests	2.53	.616	Accept
2.	Essay tests	2.55	.594	Accept
3.	Practical tests	2.59	.598	Accept
4.	Speed tests	2.10	.726	Reject
5.	Checklists	2.51	.660	Accept
6.	Questionnaires	2.53	.674	Accept
7.	Interviews	2.25	.693	Reject
8,	Rating scales	2.52	.656	Accept
9.	Observations	2.55	.635	Accept
10.	Portfolios	2.04	.733	Reject
11.	Assignments	2.47	.644	Accept

Table (2a) overleaf depicts the responses of the respondents toward appropriate methods of teaching soft skills in the new instrument. Out of the fourteen perceived methods, only ten were approved by the respondents for this study. In terms of rating, the highest rated method of teaching is the discussion method with a mean of 2.71 and standard deviation of 0.699 while the least rated one is the simulation method which has a mean of 2.50 and standard deviation of 0.625. From Table (2b), out of eleven perceived methods of assessing soft skills, eight were accepted. Practical tests is the most rated assessment method with a mean of 2.59 and standard deviation of 0.598 while the least rated is assignment with a mean of 2.47 and standard deviation of 0.644.

The findings revealed agreement among respondents on certain appropriate teaching and assessment methods for soft skills in the new instrument. Such teaching methods include: discussion, demonstration, interviewing, direct instruction, self discovery, project approach, cooperative learning, questioning, reflection and simulation. To encourage latent traits in an individual for achieving success in life, soft skills require different teaching methods for self-awareness.

In the same vein, assessment methods favoured are practical tests, essay tests, observations, objective tests, questionnaires, rating scales, checklists, and assignments. These assessment methods agree with the studies of Curtis [12] and Kechagias [3] who categorize soft skills assessment methods into standardized assessment (multiple-choice or short-structured items provided for examinees' responses), common assessment tasks (where tasks designed to provide opportunities for examinees to demonstrate and/or develop constructs intended to be assessed), performance assessments types of testing that call for demonstration of understanding and skill in applied, procedural or open-ended settings), teacher/holistic judgment (where thorough, frequent and close observation of the teacher or supervisor is required) and portfolio assessment (where individual examinee is made to select and aggregate the evidence of his own achievement of particular skills).

5. Conclusions

In this paper, efforts have been made to examine the teachability and examinability of modified soft skills in Nigeria. The results in this study have shown that out of the fifteen identified soft skills by the five European countries, only five are suitable to be taught and examined in Nigerian context. These include commitment to duty, attending to responsibilities, adaptability, resources management skills and motivation. The study was able to identify fifty content areas that could be taught under the five concepts.

Based on the findings, the five soft skills have been proven teachable using such methods like direct instruction, demonstration, discussion, simulation, self discovery, questioning, interviewing, project, cooperative learning and reflection methods. In the same manner, the study revealed that the five-factor already identified can be examined using objective tests, essay tests, practical tests, checklists, questionnaires, rating scales, observations and assignments. Other methods including speed tests, interviews and portfolios are inappropriate and unsuitable for the examination of soft skills in Nigerian school system.

6. Recommendations

The design and development of Modified Soft Skills Assessment Instrument (MOSSAI) materials on the five teachable and examinable areas are recommended to be given a considerable attention while the Nigerian Educational Research and Development Council (NERDC) should design curriculum for the soft skills as a subject covering the fifty content areas identified in this study. Policy makers, school authorities, teachers, stakeholders and the general public should be sensitized on the need to commence teaching and assessing of soft skills in our educational system. Examination bodies in Africa should start thinking of examining/assessing soft skills as part of their examinable subjects. To reduce security threats and stop unnecessary killings in our continent, there is need for the introduction of soft skills in the primary, secondary and tertiary institutions. Following these arrangements, Nigeria and indeed other countries in Sub-Sahara Africa are encouraged to introduce soft skills in their teaching curricular.

Appendix I: Soft Skills Included in the Assessment of Soft Skills (Mass) Materials by 20 Europeans Researchers

Soft Skill	Other words that mean the same thing	Examples of when this soft skill is used
Manners	Politeness, consideration, courtesy	Saying thank you, holding doors open for others, asking permission to do things etc
Ownership of tasks	Responsibility, duty, dependability	Making sure tasks are done properly, turning up on time for meetings, working in partnership with others and doing your role so they can do theirs etc
Attendance	Turning up, coming in, appearing	Arriving on time for meetings and for work. Making sure you keep people informed regarding your attendance or availability.
Motivation	Incentive, inspiration, drive, impulse	Taking on new challenges, working hard to achieve goals, thinking of new ways to do things
Professionalism	Competent, skilful, dedicated	Working to a high standard, being consistent in attitude (not allowing emotions or personalities to influence you)
Work output	Activity, productivity, production	Meeting deadlines and standards for work. Producing products to target.
Conduct in workplace	Behaviour, attitude, maturity	Respecting others, not playing games when you should be working etc
Timekeeping	On time, not late	Arriving for work or meetings on time, leaving at the right time
Verbal Communication	Talking, Consulting, meetings, discussing	Using the right tone of voice and words when speaking with colleagues etc
Organisation/ planning	Preparation, scheduling, arranging	Having all required resources to hand, thinking jobs through, arriving on time, meeting deadlines etc
Team-working/ Respect	Esteem, valuing others, helping others, consideration	Working well together on a task, making best use of your skills and the skills of others. Acknowledge the status of others and act accordingly
Helping others	Supporting, offering, training	Giving up some of your time to support those who are struggling or need help to meet a deadline
Conscientiousness	Careful, meticulous, thorough, hard working	Paying attention to detail, accurate work, making sure you do what you are paid to do
Ability to ask for help	Admitting own limitations, confidence, courage	Asking colleagues to show you how to do something or to help you complete a task on time etc
Adaptability/ Flexibility	Compliance, accepting change	Taking on new challenges, accepting changes to rules and conditions, staying late to finish urgent tasks etc

Source: Culled from teaching and assessing soft skills by K. Kechagias (2011) pages 83 and

Appendix II: Original Draft

National Business and Technical Examinations Board (Nabteb) Benin City

Dear Respondent,

    This instrument is designed to elicit relevant information from you on "Validation of Modified Soft Skills Assessment Instrument (MOSSAI) for use in Nigeria. The essence is to provide useful information for decision making on inclusion of soft skills in the school curriculum.. The instrument is purely for academic purposes. Please note that your responses would be treated with utmost confidentiality. Thanking you in anticipation for your favourable response.

Section A (Personal Profile)

    Please respond by placing a tick (✓) where appropriate.

1. Name of School
2. Type of School: Public   ☐   Private ☐
3. Gender   Male   ☐   Female ☐

Section B

    Below are statements that address some selected soft skills which you are to respond to in the form of rating scale with Very Teachable (VT), Teachable (T), Fairly Teachable (FT) and Not Teachable (NT). Please read carefully each of the under-listed statements and respond by placing a tick ( ) that best suits each of the statement along the continuum.

S/N	SOFT SKILLS	VT	T	F	NT
1.	Readily accepting responsibilities				
2.	Zealous in performing one's duties				
3.	Creativity on the job				
4.	Delegating duties to right persons				
5.	Diligence in supervision				
6.	Punctuality at work				
7.	Enthusiasm at work				
8.	Moral integrity on the job				
9.	Devotion to duty				
10	Eager to learn				
11.	Goals setting				
12.	Job security				
13.	Job enlargement				
14.	Job rotation				
15.	Reinforcement				
16.	Mastery of job content				
S/N	SOFT SKILLS	VT	T	F	NT
17.	Being readily available at work				
18.	Efficiency				
19.	Effectiveness				
20.	Time management				
21.	Good work ethics				
22.	Observance of school rules and regulations				
23.	Loyalty to duty				
24.	Patience at work				
25.	Contentment				
26.	Speaking skill				
27.	Reading skill				
28.	Writing skill				
29.	Body language				
30.	Quantity of resources				
31.	Quality of resources				
32.	Allocation of resources				
33.	Implementation				
34.	Supervision				
35.	Coordination				
36.	Evaluation				
37.	Feedback				
38.	Tolerance				
39.	Cooperation				
40.	Leadership style				
41.	Followership traits				
42.	Administrative support				
43.	Operational support				
44.	On the job training				
45.	Mentoring				
46.	Providing feedback				
47.	Insightfulness				
48.	Ability to Recall				
49.	Turn challenges to opportunities				
50.	Turn weaknesses to strength				
51.	Seek for improved knowledge				
52.	Seek for advice				
53.	Polite requests				
54.	Confidence in the ability of others				
55.	Embracing changes				
56.	Observance of ser goals				
57.	Observance of new rules and regulations at workplace				
58.	Embracing new knowledge				
59.	Perseverance				
60	Fact finding				
61.	Carefulness				
62.	Diligence				
63.	Admitting one's own limitations				

Section C

Suggested below are methods of teaching the above selected soft skills. Please indicate in the form of Very appropriate (VA), Appropriate (A), Not Appropriate (NA).

S/N	SUGGESTED METHODS OF TEACHING SOFT SKILLS	VA	A	NA
1.	Direct instruction			
2.	Demonstration method			
3.	Lecture method			
4.	Simulation method			
5.	Discussion method			
6.	Rote memorization			
7.	Self discovery method			
8.	Questioning method			
9.	Interviewing method			
10.	Project method			
11.	Mapping method			
12.	Cooperative learning			
13.	Reflection			
14.	Pictorial method			

Section D

Read carefully the suggested assessment methods by which the above selected soft skills can be assessed. Please indicate in the form of Very appropriate (VA), Appropriate (A), Not Appropriate (NA).

S/N	SUGGESTED ASSESSMENT METHODS	VA	A	NA
1.	Objective tests			
2.	Essay tests			
3.	Practical tests			
4.	Speed tests			
5.	Checklists			
6.	Questionnaires			
7	Interviews			
8.	Rating scales			
9.	Observations			
10.	Portfolio			
11.	Assignments			

Appendix III: Final Version

National Business and Technical Examinations Board (Nabteb) Benin City

Dear Respondent,

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Section A (Personal Profile)

Please respond by placing a tick (✓) where appropriate.
1. Name of School
2. Type of School: Public [   ]   Private [   ]
3. Gender   Male   [   ]   Female [   ]

Section B

Below are statements that address some selected soft skills which you are to respond to in the form of rating scale with Very Teachable (VT), Teachable (T), Fairly Teachable (FT) and Not Teachable (NT). Please read carefully each of the underlisted statements and respond by placing a tick ( ) that best suits each of the statement along the continuum.

S/N	SOFT SKILLS	VT	T	F	NT
A	Commitment to duty				
1.	Punctuality at work				
2	Moral integrity on the job				
3.	Being readily available at work				
4	Loyalty to duty				
5.	Efficiency				
6.	Effectiveness				
7.	Devotion to duty				
8.	Diligence in supervision				
9.	Enthusiasm at work				
10.	Zealous in performing one's duties				
11	Good work ethics				
12.	Eager to learn				
13.	Contentment				
14.	Creativity in the job				
15.	Delegating duties to right persons				
16.	Observance of school rules and regulations				
17.	Patience at work				
18.	Mastery of job content				
B	Attending to responsibilities				
19.	On the job training				
20.	Operational support				
21.	Providing feedback				
22	Administrative support				
23.	Mentoring				
24.	Insightfulness				
25.	Leadership style				
26.	Followership traits				
27.	Turn challenges to opportunities				
28.	Ability to Recall				
29.	Seek for improved knowledge				
30.	Turn weaknesses to strength				
31.	Feedback				
32.	Tolerance				
33.	Cooperation				
C.	Adaptability				
34.	Embracing changes				
35.	Carefulness				
36.	Fact finding				
37.	Observance of set goals				
38.	Observance of new rule and regulations at workplace				
39.	Perseverance				
40.	Confidence in the ability of others				
41.	Diligence				
42.	Embracing new knowledge				
D.	Resources management skills				
43.	Quantity of resources				
44.	Quality of resources				
45.	Allocation of resources				
46.	Implementation				
E.	Motivation				
47.	Job rotation				
48.	Job enlargement				
49.	Reinforcement				
50.	Job security				

Section C

Suggested below are methods of teaching the above selected soft skills. Please indicate in the form of Very appropriate (VA), Appropriate (A), Not Appropriate (NA).

S/N	SUGGESTED METHODS OF TEACHING SOFT SKILLS	VA	A	NA
1.	Direct instruction			
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5.	Discussion method			
6.	Rote memorization			
7.	Self discovery method			
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9.	Interviewing method			
10.	Project method			
11.	Mapping method			
12.	Cooperative learning			
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