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GENERATION OF ITEMS FOR BUSINESS STUDIES PLACEMENT TESTFOR SENIOR SECONDARY SCHOOLS IN NIGERIA

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ABSTRACT
The study aimed at generating items for business studies placement test for senior secondary schools in Nigeria. One research question guided the study. The study adopted an instrumentation design. The area of the study was Anambra State. The population of the study consists of 586 business studies teachers in two hundred and sixty-one senior secondary schools in Anambra State. Taro Yamane formula was used to determine the sample size of the study, which is 238 business studies teachers in Anambra State which were selected usinga purposive sampling technique. To generate items for BSPT, the draft instrument of 200 items were distributed to 238 business studies teachers by the researchers and his assistants in their respective schools during the 2019/2020 session, the data obtained from the exercise was subjected to factor analysis using 0.40 as a benchmark for accepting an item. The study revealed that 153 items were generated for the business studies placement test. Based on the findings of the study it was recommended that teachers, researchers, and relevant agencies should assess students for placement into the field of business studies using a placement test, students should be encouraged to choose their field of study based on their capability, interest and not by parents' decision, teachers' choice, peer influence, subjects' area available in the school.

Introduction

There are different fields of study in education and how one excels in them depends on their intellectual capability as well as proper placement. When one is properly placed in a befitting field of study they are most likely to perform well. The senior secondary school curriculum in Nigeria comprises four fields of study namely science and mathematics, technology, humanities, and business studies. These four fields of study consist of 8, 9, 12, 5 subjects respectively (Federal Republic of Nigeria, FRN), 2013). Each student is expected to offer four cross-cutting subjects namely English language, mathematics, civic education, and select one of the 34 trade/entrepreneurship subjects. Each student may then choose two to five subjects from each of their preferred four fields of studies depending on their potential, interest & capabilities such that the minimum number of subjects is eight while the maximum of the subjects is nine (Nigerian Educational Research and Development Council (NERDC), 2012).

In senior secondary school, Business Studies prepare learners to be self-reliant and have an understanding of the economy and the financial system of the world (Durktar and Lohnan, 2013; Emeasoba and Igwe, 2016; Esene, 2013; Umezulike and Okoye, 2013). Business studies at the senior secondary school consist of five units which include commerce, accounting, office practice, store management, and insurance (FRN, 2013). Business studies ensure students develop skills, aptitudes, potentials, and competencies to be useful citizens and contribute economically to society (Esene, 2012). To Umezulike and Okoye (2013) business studies is the key agent of economic and technological development either as a way of developing human capacity, increasing the shield of the workforce for modernization, industrialization, and environmental development or as a matter of personal freedom and empowerment of the populace.

Business studies is aimed at inculcating or giving the training which is directed towards developing learners/students to be productive in

their areas of endeavor which will lead to either self-employment/self-reliance or gain employment in the private/public sector(Dukturand Lohnan, 2013)The objectives of business studies at the senior secondary school level are rarely achieved judging from students' poor performance in examinations and inability to meet the requirement to proceed to higher institutions (Nwachokor, Udoye and Orhena, 2016).

Furthermore, the poor performance in the field of business studies and other related fields contrasts with the social and economic objectives formulated by the government to achieve sustainable growth in Nigeria (Follmer, Talbot, Kristof-Brown, Astrove and Billsberry, 2018). It is worthy to note that many students find it difficult to cope with various academic activities in the school, they get discouraged, delayed, or diverted from their academic goals (Belfield, 2014; Follmer*et al*, 2013). When students are wrongly placed, the chances of completing the program are low and students' efficiency decreases (Belfield, 2014). Thus there is a need for educational institutions to develop a mechanism for placing students in various fields of study, this can be done through utilizing a well-developed assessment tool. The purpose for assessing students includes licensing, certification, diagnosis, and placement (Ado, Rohaya, Noor, Halijah, and Sanitah, 2019). Placing can be done using a placement test.

Though various researchers have developed tests across different fields and subjects in education like mathematics, economics, physics, chemistry, language, music, and science (Ado, Rohaya, Noor, Halijah and Sanitah, 2019; Angie and Afolabi, 2017; Ceniza and Cereno, 2012; Odukoya, Olajide, Osadebe and Nwabueze, 2018), educational researchers have paid little attention to the development and validation of placement tests in the field of business studies for senior secondary schools. In essence, there is a paucity of business studies placement tests, thereby constituting an educational gap. Also with regards to the use of placement tests, different studies have found that the effective use of placement tests improves students' performance, provides feedback for taking an appropriate decision on students' eligibility in any field or program of their choice. (Ado, Rohaya, Noor, Halijah and Sanitah, 2019; Zhi, 2015; Sai, 2015). Thus, the development of this placement test for the field of business studies will make it available for senior secondary schools, which if used, will measure students' proficiency or readiness for academic activities and predict students' academic self-efficacy and extrinsic goal orientation. However,most teachers do not seem to be competent enough in developing the desired instrument necessary for academic assessment.

Development and validation of instruments especially for placement involve complex steps, processes, the interrelationship of different concepts, and latent variables. In some cases of test development, teachers exclude the most paramount aspect and pay more attention to facts and trivial aspects of the subject. Most tests designed by teachers concentrate on a few aspects of instructional objectives and neglecting others, test items may be either too difficult some have more than one scoring key while some cannot be scored (Opara and Magnus-Arewa, 2017, Osegbo and Ifeakor, 2008). It is sad to note that most of the items included by the teachers focus on lower instructional objectives with little attention to the higher ones, some tests lack proper coverage of the content of the subject matter in the right proportion.

Certain steps must be followed in developing a test that includes item development and item validation. Item development includes content definition, preparation of test specification, and preparation of the items, content validation/experts judgment, pilot testing, data analysis, and revision of test items (Nwana, 2007;Ukwuije and Opara, 2012) and Rivera (2007), the stages for developing a test comprises of planning the test, constructing the test items, validation of the test, pilot testing, trial testing, item analysis, assembling of the final test.

All these processes are to be carefully executed to ensure the development of a valid and reliable instrument to estimate item and person ability.

Unlike standardized placement tests, most tests in use are locally developed tests with comparatively limited resources and expertise, despite their significant impact on various test stakeholders, especially business studies students. Due to the limited investment of resources, there are relatively few studies on the development and validation of placement tests in various fields of study (Isbell, Nelly and Arvizu, 2014; Nakamura, 2007; Zhi, 2015). Apart from the psychometric focus in tests, even fewer studies have focused on the development of placement tests (Plakans and Burke, 2013; Zhi, 2015). Overall, the scarcity of studies on developing business studies placement test in the field of business studies is inappropriate given the status of business studies in equipping students with skills, aptitudes, potentials, and competencies needed to contribute economically to society and overcome the challenges of the 21st-century world of business.

This problem could be linked to wrong placement among other factors, many students do not choose the right subjects at school, the right subjects being those which a student can study easily. Most often students choices are determined by how much they like the teachers, what subjects parents and friends think are most suitable and of course, what options are offered by the school. Senior secondary schools in Nigeria neglect the utilization of well-developed placement instruments. This problem when not addressed is that the society and educational institutions might be misled in determining the qualified candidates for employment and admission. The lofty objectives of business studies in Nigerian senior secondary school will be adversely affected and might not be achieved. The need to match the academic capabilities of the students with the requirements of business studies in senior secondary schools is what prompted this study on the generation of items for business studies placement test in senior secondary schools in Nigeria.

Research Questions

One research question guided the study.

1. What are the items generated for business studies placement test for senior secondary schools in Nigeria?

Research Method

The study adopted an instrumentation design. This type of design is aimed at developing and authenticating the capability of an instrument for the measurement of a given behavior. The area of the study is Anambra State. The state is located in the south-eastern part of Nigeria and consists of 21 local government areas. The population of the study consists of 586 business studies teachers in two hundred and sixty-one senior secondary schools in Anambra State. Taro Yamane formula was used to determine the sample size of the study, which is 238 business studies teachers in Anambra State. For the teachers, having determined the sample size of teachers using Taro Yamane, 238 business studies teachers were purposively selected from the state because they use the same business studies curriculum irrespective of their educational zone. The instrument used for data collection was a draft of the business studies placement test (DBPT). The instrument was developed by the researcher based on the NERDC curriculum for business studies for senior secondary schools. The instrument has a section containing 200items that elicit for data to answer the research questions. A five-point scale of Very Highly Suitable, HS: Highly Suitable, MH: Moderately Suitable, LS: Lowly Suitable, VLS: Very Lowly Suitable were written against each item to enable business studies teachers to identify the level of appropriateness of each item for inclusion in the instrument. The instrument was administered to 238 business studies teachers by the researcher and his assistants in their respective schools during the 2019/2020 session. To answer research question one, items from the themes of

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subjects in business studies will be subjected to factor analysis using 0.40-factor loading as a benchmark for acceptance (Abonyi, 2003). This implies that items with a factor loading of 0.40 and above will be included in the generated items for the instrument, while items with factor loading less than 0.40 will be considered as factorial impure, therefore not appropriate to be included in the generated items for the business studies placement test.

Presentation of Results

Research Question 1

What are the items generated for the business studies placement test for senior secondary schools in Nigeria?

Table 1: Factor loading summary of draft of business studies placement test

Factors	Items	Decision
Factor 1	46, 47, 49, 56, 58, 64, 65,115, 116, 118, 124, 125, 127, 133, 134, 184, 185, 187, 193, 194, 196, 200	Retained
Factor 2	2, 12, 22, 31, 71, 82, 91, 100, 140, 150, 160, 169	Retained
Factor 3	1, 11, 21, 30, 70, 80, 90, 93, 139, 149, 159, 168	Retained
Factor 4	3, 13, 24, 32, 72,82, 92, 101, 141, 151, 161, 170	Retained
Factor 5	5, 15, 25, 34, 74, 84, 93, 103, 143, 153, 163	Retained
Factor 6	4, 14, 33, 73, 83, 93, 102, 142, 152, 162, 171	Retained
Factor 7	8, 9, 19, 29, 38,40, 88, 98, 107, 109, 147, 157, 167, 176, 178	Discarded
Factor 8	18, 28, 37, 77, 87, 97, 106, 146, 156, 166, 175	Retained
Factor 9	7, 27, 36, 76, 86, 96, 105, 145, 155, 165, 174	Discarded
Factor 10	6, 16, 26, 35, 75,85, 95, 104, 144, 154, 164, 173	Retained
Factor 11	45, 63, 114, 123, 132, 183, 192, 199	Retained
Factor 12	41, 50, 60, 111, 112, 120, 129, 180, 198	Retained
Factor 13	42, 51, 60, 111, 112, 120, 129, 180, 198	Retained
Factor 14	20, 89, 158, 189	Retained
Factor 15	43, 44, 53, 54, 62, 115, 122, 131, 182, 191	Retained
Factor 16	52, 61, 121, 130, 181, 190	Retained
Factor 17	48, 57, 66, 117, 126, 136, 186, 195	Discarded
Factor 18	68	Discarded
Factor 19	55, 66, 67, 137	Discarded

Item 7,8, 9, 19, 27, 29, 36, 38, 39, 40, 48, 55, 57, 66, 67, 68, 69, 76, 78, 79, 86, 96, 98, 105, 107, 108, 109, 117, 126, 135, 136, 137, 138, 145, 147, 148, 155, 157, 165, 167, 174, 176, 177, 178 186, 195 cross loaded in factor 7, 9, 17, 18, 19 while item 10 loaded below 0.40. These items were discarded.

Table 2: Items generated for business studies placement test for senior secondary schools in Nigeria

Factors	Items	Expository Notes	Factor Loadings	Remarks
Factor 1	Q46	A limitation to international trade is?	0.87	Appropriate
	Q47	The overriding advantage of home trade over foreign trade is?	0.85	Appropriate
	Q155	Which of these is not a function of management (a) Motivation (b) Mobility (c) Delegation(d) Controlling	0.38	Inappropriate
	Q49	The two main forms of communication are?	0.86	Appropriate
	Q167	The system of transport used at sea based on standard containers is……..(a) Containerization(b) Localization © Privatization (d) None of the above	0.37	Inappropriate
	Q56	Money is generally acceptable for transactions due to	0.85	Appropriate
	Q58	Which is of the following is a quality of money?	0.82	Appropriate
	Q64	Which of the following is not an advantage of warehousing	0.87	Appropriate
	Q65	Goods discharged from ships on which import duties have not been paid are kept in the?	0.85	Appropriate

Q135	Those items that help to ensure efficiency in office operation are called (a) office work (b) office operation (c) office items (d) office equipment	0.43	Inappropriate
Q115	……is general ledger accounts containing a summary of all debtors and creditors' balances	0.82	Appropriate
Q165	According to many retailers, what is the most important factor in retailing success (a) Service (b) good atmosphere (c) helpful employees (d) location	0.36	Inappropriate
Q116	The handling of all incoming and outgoing correspondence is the responsibility of	0.85	Appropriate
Q118	Outgoing mail should be?	0.86	Appropriate
Q155	Which of these is not a function of management (a) Motivation (b) Mobility (c) Delegation(d) Controlling	0.37	Inappropriate
Q124	…….is used to communicate with individuals outside of the office.	0.82	Appropriate
Q125	Financial documents include all except	0.81	Appropriate
Q174	The organization establishes a relationship between (a) People, work and resources (b) Customer, work and resources (c) People, work and management (d) Customer, work and management	0.36	Inappropriate
Q127	To present a professional image of the company a receptionist should	0.80	Appropriate
Q133	John wants to destroy a document that he wants no one to see, which office machine would he use?	0.87	Appropriate
Q147	A closed office could be described as one which is used by (a) one executive with perhaps, his secretary (b) the staff of the business executive (c) supervisors and managers (d) the administrative staff	0.42	Inappropriate
Q134	The name of office equipment that accepts and process data into information which can at the same time store and give out information is	0.78	Appropriate
Q184	If Mr.Amobi takes a fire insurance policy with an average clause, his compensation will be	0.87	Appropriate
Q185	What insurance principle has Mr.Micheal violated if he decides to overstate the actual value of his property	0.85	Appropriate
Q117	Internal mail includes the following except (a) application for leave (b) letter of promotion (c) letter of employment in another company (d) termination of appointment	0.48	Inappropriate
Q187	The right of an insurance company to stand in place of an insured against a third party, who is liable for the occurrence of a loss, is the principle of	0.84	Appropriate
Q193	…..is a document used for tendering which itemizes all work to enable the contractor to price the work for which he or she is bidding?	0.85	Appropriate
Q194	The two main categories under which marine loss falls are	0.83	Appropriate
Q196	A floating policy is an example of (A) marine insurance	0.80	Appropriate
Q200	Which of the following terms is NOT related to the insurance sector?	0.92	Appropriate
Q7	The three main classifications of occupation are (a) construction, trade, and services (b) manufacturing, industry and services (c) farming, banking and trading (d) industry, commerce, and services	0.47	Inappropriate
Q8	An aspect of commerce that facilitates the distribution of products is (a) advertising (b) transportation (c) Marketing (d) importation	0.35	Inappropriate
Q9	The mode of transportation that conveys a limited variety of products through fixed laid routes is (a) waterways (b) road	0.41	Inappropriate

	(c) rail (d) pipeline		
Q19	The rate where a country's exports exchange for its imports is called (a) term of payments (b)balance of trade(c) term of trade(d) balance of payments	0.39	Inappropriate
Q27	A distinguishing characteristic of a limited liability company is that it (a) is a collection of many sole proprietors (b) is a multiple partnerships (c) can be sue and be sued (d) has limited resources	0.37	Inappropriate
Q36	Which of the following sets of items were used for exchange in Nigeria before money was introduced? (a) cowries, iron rods, brass rods and copper rods (b) iron rods, copper rods, manila and cowries (c) cowries, manila, brass, rod, and copper wires (d) copper wires, brass wires, cowries and iron rod	0.37	Inappropriate
Q38	The fact that using money avoids the double coincidence of wants necessary in a barter economy illustrates which function of money? (A) unit of account (B) medium of exchange (C) store of value (D) source of liquidity	0.39	Inappropriate
Q40	Which of the following is an example of trade association (a) European Union (b) National Marketing Board (c) Organization of African Unity (d) National Farmers Council	0.41	Inappropriate
Q48	Communication enhances business activities by (a) facilitating interaction between producers and consumers (b) facilitating interaction among media houses (c) ensuring the movement of goods from the producers to the consumer	0.45	Inappropriate
Q55	A characteristic of money that ensures that its value is not lost is (a) homogeneity (b) easy portability (c) divisibility (d) relative scarcity	0.70	Inappropriate
Q57	Money can simply be referred to as a (a) measure of value (b) standard of value (c) means of settlement (d) durable asset for doing business	0.47	Inappropriate
Q66	Accounting information seeks to provide (a) Analysis of accounts to trade debtors (b) Permanent records for all transactions (c) Audited reports on the accounts of a company (d) Data about the employees of a company	0.45	Inappropriate
Q67	One of the differences between bookkeeping and accounting is that the former (a) records data while the latter doesn't (b) is regarded as the language of the business while the latter ascertain its strength (c) interprets data while the latter records it (d) summarizes information while the latter communicates it	0.44	Inappropriate
Q76	Use the information below to answer July 1- started the business with N10, 000 July 31- paid Agrotech N6000 owing them The double entry for July 1 would be (a) debit capital and credit cash (b) credit cash and debit bank (c) debit cash and credit capital debit purchases and credit cash	0.37	Inappropriate
Q78	The correct posting in the double-entry system of account when there is an increase in assets, expenses, capital, or liabilities is to debit (a) capital and credit liabilities (b)	0.45	Inappropriate

		liabilities and credit assets (c) assets and credit capital (d) capital and credit assets		
	Q88	The transaction in number 87 would be recorded in the cash book as a debit (a) cash and credit bank (b) bank and credit bank (c) cash and credit cash (d) bank and credit bank	0.38	
	Q98	Use the information below to answer the questions below Sundry debtor N 20, 000 Provision for bad debt N 500 Provision for the bad debt at 4% of sundry debtors Determine the provision for bad debts to profit and loss account (a) N 500 (b) N 820 (c) N 1300 (d) N 300	0.38	Inappropriate
	Q105	The cause of discrepancies between the bank statement and the cash book that overstates the cash book is the (a) dividend received (b) uncredited expenses (c) uncredited cheques (d) interest on lodgment	0.36	Inappropriate
	Q109	The internal control system I. Reduces accounting errors II. Increases accounting errors III. Lessens the risks of intentional irregularities IV. Increases irregularities (a) I and II (b)I and III (c)II and III (d)II and IV	0.49	Inappropriate
	Q126	_____ is used in situations where a message is meant to accompany a specific file and in cases that require more privacy than an email. (a) Receipt (b) Memo (c) Register (d) Letter	0.44	Inappropriate
Factor 2				
	Q2	Which of the following are the components of commerce	0.88	Appropriate
	Q12	The role of a wholesaler in the channel of distribution is to	0.94	Appropriate
	Q22	The term PLC implies that the shares are	0.93	Appropriate
	Q31	A major advantage of a cooperative society is that it	0.94	Appropriate
	Q71	The rule of accounting equation requires that account payable should be placed under	0.95	Appropriate
	Q82	Which of the following accounting conventions suggests that accountants should use a method of valuation that understates rather than overstates results?	0.93	Appropriate
	Q138	Which office machine allows the user to put a stamped impression on an envelope? (a) Fax machine (b) Franking machine (c) . Photocopier (d) Computer	0.47	Inappropriate
	Q91	Jude mistakenly entered N 7, 000 as credit sales in Abba's account instead of Baba's account. This is	0.93	Appropriate
	Q100	The depreciation on a motor vehicle that is being used for manufacturing and administration is charged to the?	0.94	Appropriate
	Q140	You want to send a copy of a document overseas urgently, what would you use?	0.96	Appropriate
	Q150	Another name for private office is	0.96	Appropriate
	Q160	A purchase requisition will include the following headings except	0.93	Appropriate
	Q169	Which of the following has a major influence on pricing decisions?	0.94	Appropriate
Factor 3				
	Q1	Commerce is defined as the study of how	0.88	Appropriate
	Q11	Which of the following sets is entirely made up of middlemen?	0.89	Appropriate

	Q21	A country that offers tourism can be said to be involved in	0.90	Appropriate
	Q30	Which of the following cooperatives societies offers direct and indirect credit facilities?	0.87	Appropriate
	Q70	A major advantage of a cooperative society is that it	0.91	Appropriate
	Q80	The traditional way of paying a cooperative dividend is to distribute profit in proportion to members	0.91	Appropriate
	Q137	In procuring office equipment, the following must be considered except (a) the cost of the machine (b) its availability (c) durability of the machine (d) color of the equipment	0.48	Inappropriate
	Q90	Calculate the expenses debited to the profit and loss account	0.90	Appropriate
	Q93	The major focus of the trading account is to show	0.91	Appropriate
	Q139	Which equipment is used to store files safely?	0.91	Appropriate
	Q148	One of the advantages of a small office is that (a) the employee can gain a lot of experience (b) it develops healthy personnel relationship (c) it is easy to establish (d) it gives room for office aids	0.38	Inappropriate
	Q149	All offices perform a variety of	0.91	Appropriate
	Q159	A document that authorizes the issue of materials for use is	0.89	Appropriate
	Q168	This transport document enables a carrier to release goods to a designated consignee	0.86	Appropriate
	Q39	Chambers of commerce are not restricted to a particular industry while trade association consists of (a) Highly regulated government agencies (b) Members engaged in the same trade (c) Made up of members that are registered (d) Made of firms in the banking industry	0.35	Inappropriate
	Q68	The historical development of accounting reveals that it (a) is an ideal subject for financial development (b) is a product of its environment (c) deals with debit and credit of items (d) is a product of financial development	0.45	Inappropriate
Factor 4				
	Q3	The central focus of commerce is	0.92	Appropriate
	Q13	One of the functions of a retailer is the	0.85	Appropriate
	Q24	A public limited liability company having a nominal capital made up of 200, 000 ordinary shares of 50k each decided to issue 50% of it to the public. What is the authorized capital?	0.92	Appropriate
	Q32	The traditional way of paying a cooperative dividend is to distribute profit in proportion to members'	0.93	Appropriate
	Q72	The accounting equation can be expressed as	0.93	Appropriate
	Q82	Which of the following accounting conventions suggests that accountants should use a method of valuation that understates rather than overstates results?	0.93	Appropriate
	Q92	A trial balance is usually prepared by an accountant from account balances in the ledger for the purpose of	0.92	Appropriate
	Q101	Which of the following is used to update the cash book in bank reconciliation	0.93	Appropriate
	Q141	Three departments in office organization includes_____, _____ &_____	0.93	Appropriate
	Q151	In organizing a store, the storekeeper must consider	0.93	Appropriate
	Q160	A document that authorizes the issue of materials for use is	0.93	Appropriate
	Q170	The market price of a share of common stock is determined by……	0.93	Appropriate
Factor 5				
	Q5	The sustainable growth of commerce is largely due to	0.93	Appropriate
	Q15	The rewards of rents, wages, interests, profits accrue from……. Respectively	0.88	Appropriate

	Q25	The difference between a private and public limited liability company is that the former	0.98	Appropriate
	Q34	If an importer wants a freehand to obtain goods from any manufacturer, he needs to provide	0.98	Appropriate
	Q74	To which class of account would you post each of the following amounts	0.97	Appropriate
	Q84	Stationery that will be used over a long period is usually recorded as an expense instead of an asset. This concept is called	0.97	Appropriate
	Q94	Provision for discount allowed can be recorded as a debit to	0.98	Appropriate
	Q103	An item credited in the bank statement but yet to be recorded in the firms' cashbook is	0.98	Appropriate
	Q143	The department that controls and directs the affairs of an organization is……department	0.98	Appropriate
	Q153	Which of the following is not important in store layout arrangement?	0.98	Appropriate
	Q163	Which of the following is true for Inventory control?	0.96	Appropriate
	Q172	In marketing terms, _____ refers to what we get for what we pay	0.98	Appropriate
	Q105	The cause of discrepancies between the bank statement and the cash book that overstates the cash book is the (a) dividend received (b) uncredited expenses (c) uncredited cheques (d) interest on lodgment	0.88	
Factor 6				
	Q4	All are functions of commerce except?	0.94	Appropriate
	Q14	Production involves	0.92	Appropriate
	Q33	Freight note is a document	0.95	Appropriate
	Q73	Payment of cash of N20 to John was entered on the receipts side of the cash book in error and credited to John's account. Which of the journal entries can be used to correct the error	0.90	Appropriate
	Q83	The accounting principle that is applied to check arbitrary actions on the part of accountants is	0.92	Appropriate
	Q93	The major focus of the trading account is to show	0.91	Appropriate
	Q102	The process of reconciling cheques between banks is termed cheque	0.95	Appropriate
	Q142	The sales department	0.95	Appropriate
	Q152	Which of the following documents will be needed when goods are received in the store?	0.92	Appropriate
	Q162	Which of the following is not an inventory?	0.88	Appropriate
	Q171	The market price of a share of common stock is determined by……	0.95	Appropriate
Factor 7	Q9	The mode of transportation that conveys a limited variety of products through fixed laid routes is (a) waterways (b) road (c) rail (d) pipeline	0.77	Inappropriate
	Q19	The rate where a country's exports exchange for its imports is called (a) term of payments (b)balance of trade(c) term of trade(d) balance of payments	0.80	Inappropriate
	Q38	The fact that using money avoids the double coincidence of wants necessary in a barter economy illustrates which function of money? (A) unit of account (B) medium of exchange © store of value (D) source of liquidity	0.76	Inappropriate
	Q40	Which of the following is an example of trade association (a) European Union (b) National Marketing	0.82	Inappropriate

	Board (c) Organization of African Unity (d) National Farmers Council		
Q165	According to many retailers, what is the most important factor in retailing success (a) Service (b) good atmosphere (c) helpful employees (d) location	0.86	Inappropriate
Q78	The correct posting in the double-entry system of account when there is an increase in assets, expenses, capital, or liabilities is to debit (a) capital and credit liabilities (b) liabilities and credit assets (c) assets and credit capital (d) capital and credit assets	0.79	Inappropriate
Q167	The system of transport used at sea based on standard containers is……..(a) Containerization(b) Localization © Privatization (d) None of the above	0.78	Inappropriate
Q88	The transaction in number 88 would be recorded in the cash book as a debit (a) cash and credit bank (b) bank and credit bank (c) cash and credit cash (d) bank and credit bank	0.79	Inappropriate
Q98	Use the information below to answer the questions below Sundry debtor N 20, 000 Provision for bad debt N 500 Provision for the bad debt at 4% of sundry debtors Determine the provision for bad debts to profit and loss account (a) N 500 (b) N 820 (c) N 1300 (d) N 300	0.83	Inappropriate
Q109	The internal control system I. Reduces accounting errors II. Increases accounting errors III. Lessens the risks of intentional irregularities IV. Increases irregularities (a) I and II (b)I and III (c)II and III (d)II and IV	0.82	Inappropriate
Q147	A closed office could be described as one which is used by (a) one executive with perhaps, his secretary (b) the staff of the business executive (c) supervisors and managers (d) the administrative staff	0.79	Inappropriate
Factor 8			
Q18	The reward for land is……	0.87	Appropriate
Q28	The major types of the warehouse are	0.88	Appropriate
Q37	The exchange of gifts of goods and services of a specified value is called	0.88	Appropriate
Q77	The double entry for July 31 would be	0.88	Appropriate
Q87	Micheal is a retailer. He recorded sales representing 95% cash and 5% credit. He took the total cash sales of N19000 from the business tray and banked it, The credit sales for the period would be	0.88	Appropriate
Q97	If the scrap value is presently N15, 000 what will be the yearly depreciation using the straight-line method	0.88	Appropriate
Q106	Given that the balance as per cash book after adjustment was N6315, unpresentedcheques N1000, and the bank statement balance N3240. What was the balance of the uncredited cheques?	0.78	Appropriate
Q146	Office layout is concerned with	0.88	Appropriate
Q156	A warehouse owned and controlled by an independent business firm is called	0.88	Appropriate
Q166	The means that helps people to travel from one place to another are called the mode of	0.88	Appropriate
Q175	The organization is a process of……	0.88	Appropriate
Q8	An aspect of commerce that facilitates the distribution of products is (a) advertising (b) transportation (c) Marketing (d) importation	0.77	Inappropriate

Factor 9	Q7	The three main classifications of occupation are (a) construction, trade, and services (b) manufacturing, industry and services (c) farming, banking and trading (d) industry, commerce, and services	0.75	Inappropriate
	Q27	A distinguishing characteristic of a limited liability company is that it (a) is a collection of many sole proprietors (b) is a multiple partnerships (c) can be sue and be sued (d) has limited resources	0.88	Inappropriate
	Q174	The organization establishes a relationship between (a) People, work and resources (b) Customer, work and resources (c) People, work and management (d) Customer, work and management	0.88	Inappropriate
	Q36	Which of the following sets of items were used for exchange in Nigeria before money was introduced? (e) cowries, iron rods, brass rods and cooper rods (f) iron rods, copper rods, manila and cowries (g) cowries, manila, brass, rod and copper wires (h) copper wires, brass wires, cowries, and iron rod	0.88	Inappropriate
	Q76	Use the information below to answer July 1- started business with N10, 000 July 31- paid Agrotech N6000 owing them The double entry for July 1 would be (a) debit capital and credit cash (b) credit cash and debit bank (c) debit cash and credit capital (d) debit purchases and credit cash	0.88	Inappropriate
Factor 10				
	Q6	One of the most important factors that determine the choice of occupation is	0.87	Appropriate
	Q16	The production process that combines two or more raw materials into one end product is	0.87	Appropriate
	Q26	Goods discharged from ships on which import duties have not been paid are kept in the	0.81	Appropriate
	Q35	The document that indicates obligation that is transferable by delivery and endorsement is a?	0.89	Appropriate
	Q137	In procuring office equipment, the following must be considered except (a) the cost of the machine (b) its availability (c) durability of the machine (d) color of the equipment	-0.53	Inappropriate
	Q75	To which class of account would you post each of the following amounts, receipt of capital from the owner of the business	0.78	Appropriate
	Q85	Assigning revenues to the accounting period in which goods are sold or services rendered and expenses incurred is known as	0.87	Appropriate
	Q95	An amount or percentage deducted from the normal selling price of something is……	0.73	Appropriate
	Q104	In a bank reconciliation statement, the interest charged for overdrawn balances should be added to the	0.79	Appropriate
	Q144	The department in an organization that performs the function of preparing vouchers and payment of salaries and wages of staff is……	0.89	Appropriate
	Q154	What does a mission statement specify that the organization will achieve?	0.88	Appropriate
	Q164	_____ includes all the activities involved in selling	0.81	Appropriate

		products or services directly to final consumers for their personal, nonbusiness use.		
	Q173	An organization general expression of its overall purpose is known as its	0.89	Appropriate
	Q68	The historical development of accounting reveals that it (a) is an ideal subject for financial development (b) is a product of its environment (c) deals with debit and credit of items (d) is a product of financial development	-0.52	Inappropriate
Factor 11				
	Q45	Foreign trade also involves	0.86	Appropriate
	Q63	The maximum number of persons who are legally allowed to operate in a partnership is	0.95	Appropriate
	Q114	Which of the following is in a debitors control accounts	0.93	Appropriate
	Q123	A receipt is legal evidence of	0.94	Appropriate
	Q132	A dictating machine is normally used to……message	0.95	Appropriate
	Q183	The principle in insurance that calls that company disclose all material facts of the risk to be covered?	0.95	Appropriate
	Q192	The agreement between the client and the contractor in which the parties are specified and their responsibilities are defined in the construction process.	0.96	Appropriate
	Q199	The compensation that the insured gets depends heavily on the	0.88	Appropriate
Factor 12				
	Q41	The major functions of a trade association are that it	0.90	Appropriate
	Q50	The major aim of establishing a public corporation is to	0.87	Appropriate
	Q59	A form of money with a face value that is greater than the value of the metal content is…	0.90	Appropriate
	Q110	A debtors' control account includes which of the following?	0.89	Appropriate
	Q119	The information sent out from one organization is called	0.89	Appropriate
	Q128	The receptionist handles the following documents except	0.90	Appropriate
	Q179	The person who undertakes life assurance is said to be	0.90	Appropriate
	Q188	The temporary insurance certificate issued to the insured before drawing up a policy is a	0.88	Appropriate
	Q197	Endowment policy in the insurance business is an aspect of	0.88	Appropriate
Factor 13				
	Q42	The main objective of a trade association is to	0.88	Appropriate
	Q51	The federal government made efforts at rendering public enterprises more efficient and profit-oriented through the process of	0.90	Appropriate
	Q60	Which is the following is not an advantage of a partnership	0.90	Appropriate
	Q111	Where are the details behind the control account values captured?	0.89	Appropriate
	Q112	The control account is also known as	0.80	Appropriate
	Q120	The mail sent from one department to another within the same organization is called	0.92	Appropriate
	Q129	A receptionist should have good communication skills so they can	0.73	Appropriate
	Q180	The difference between indemnity insurance and non-indemnity insurance is that the latter provides……	0.92	Appropriate
	Q198	A risk that can be estimated and calculated to be compensated is	0.88	Appropriate
Factor 14				
	Q20	The rate where a country's exports exchange for its imports is called	0.86	Appropriate

	Q89	Calculate the gross profit	0.73	Appropriate
	Q148	One of the advantages of a small office is that (a) the employee can gain a lot of experience (b) it develops healthy personnel relationship (c) it is easy to establish (d) it gives room for office aids	0.85	Inappropriate
	Q158	In receiving goods, the warehouse must	0.86	Appropriate
	Q189	When 'FOB is written on a document it implies that the buyer bears	0.90	Appropriate
	Q39	Chambers of commerce are not restricted to a particular industry while trade association consists of (a) Highly regulated government agencies (b) Members engaged in the same trade (c) Made up of members that are registered (d) Made of firms in the banking industry	0.85	Inappropriate
Factor 15				
	Q43	The concept that refers to the sale, transfer, or exchange of goods and services is	0.85	Appropriate
	Q44	In international trade, exchanging goods for other goods and services purchased instead of paying in foreign currency is known as	0.89	Appropriate
	Q53	Which of the following is not a form of organization of public sector enterprises?	0.94	Appropriate
	Q54	A Corporation established under a special law of parliament is	0.96	Appropriate
	Q62	Partnerships are most suitable where	0.94	Appropriate
	Q115	….. is general ledger accounts containing a summary of all debtors and creditors' balances	0.82	Appropriate
	Q122	The document that shows records of discussion or events and proceedings that took place in the particular meeting is called	0.94	Appropriate
	Q131	A visitor wants to park their car in the company car park, what is the appropriate thing to be done by the security man?	0.92	Appropriate
	Q182	Insurance companies operate on the principle of indemnity. This means that an insured person or firm collects	0.94	Appropriate
	Q191	…….describes specific requirements and instructions for the work. Mostly they are addendums to the general conditions.	0.92	Appropriate
Factor 16				
	Q52	Public enterprises are owned by?	0.90	Appropriate
	Q61	Which is the following is not contained in a deed of partnership	0.91	Appropriate
	Q121	The document showing the data of all the staff in an organization is called	0.90	Appropriate
	Q130	A receptionist should have a good memory for names and faces, so they can	0.89	Appropriate
	Q181	Assurance is different from insurance in that the former is based on	0.91	Appropriate
	Q190	Which of the following are essential features of a valid simple contract?	0.91	Appropriate
Factor 17	Q48	Communication enhances business activities by (a) facilitating interaction between producers and consumers (b) facilitating interaction among media houses (c) ensuring the movement of goods from the producers to the consumer	0.78	Inappropriate
	Q66	Accounting information seeks to provide (a) Analysis of accounts to trade debtors (b) Permanent records for all transactions © Audited reports on the accounts of a company (d) Data about the employees of a company	0.78	Inappropriate
	Q57	Money can simply be referred to as a (a) measure of value (b) standard of value (c) means of settlement (d) durable asset for	0.78	Inappropriate

		doing business		
	Q117	Internal mail includes the following except (a) application for leave (b) letter of promotion (c) letter of employment in another company (d) termination of appointment	0.68	Inappropriate
	Q126	_____ is used in situations where a message is meant to accompany a specific file and in cases that require more privacy than an email. (e) Receipt (f) Memo (g) Register (h) Letter	0.75	Inappropriate
	Q135	Those items that help to ensure efficiency in office operation are called (a) office work (b) office operation (c) office items (d) office equipment	0.	
Factor 18		Which office machine allows the user to put a stamped impression on an envelope? (a) Fax machine (b) Franking machine (c) Photocopier (d) Computer	0.72	Inappropriate
	Q68	The historical development of accounting reveals that it (a) is an ideal subject for financial development (b) is a product of its environment (c) deals with debit and credit of items (d) is a product of financial development	0.35	Inappropriate
Factor 19	Q55	A characteristic of money that ensures that its value is not lost is (a) homogeneity (b) easy portability (c) divisibility (d) relative scarcity	-0.32	Inappropriate
	Q67	One of the differences between bookkeeping and accounting is that the former (a) records data while the latter doesn't (b) is regarded as the language of the business while the latter ascertain its strength (c) interprets data while the latter records it (d) summarizes information while the latter communicates it	0.35	Inappropriate
	Q136	Office equipment can be best cared for by (a) assigning a person to monitor the equipment (b) ensuring each piece of equipment must be maintained and serviced by a professional (c) using without checking if there is any fault (d) by playing with the equipment	0.35	Inappropriate

The data in table 2 shows how the items loaded and clustered around 16 factors extracted. Item 7,8, 9, 19, 27, 29, 36, 38, 39, 40, 48, 55, 57, 66, 67, 68, 69, 76, 78, 79, 86, 96, 98, 105, 107, 108, 109, 117, 126, 135, 136, 137, 138, 145, 147, 148, 155, 157, 165, 167, 174, 176, 177, 178 186, 195 cross loaded in factor 7, 17, 18, 19 while item 10 loaded below 0.40, these items were considered inappropriate. The data in table 2 show the details of 153 appropriate items generated for business studies placement test that were found to be appropriate to be included in the instrument.

Discussion of Findings

The finding on the generation of items for the business studies placement test for senior secondary schools in Nigeria shows that 153 items were generated from the 200 items raised for the business studies placement test. These items emerged because they all had factor loading that ranged from 0.40 to 1.00. 47 items were considered inappropriate for inclusion in the generated items and teachers of business studies to a great extent found them appropriate to be included in the items generated for this placement test. These findings are in line with the works of Ibrahim (2012), Okeme (2011) who opined that only items that satisfied all psychometric properties in addition to high factor loading should be considered as

appropriate for inclusion in an assessment instrument. Some of the items that were generated include one of the most important factors that determine the choice of occupation is, the role of a wholesaler in the channel of distribution is to, which of the following cooperatives societies offers direct and indirect credit facilities, which is of the following is a quality of money, the accounting principle that is applied to check arbitrary actions on the part of accountants is, the major focus of the trading account is to show, the receptionist handles the following documents except, which equipment is used to store files safely, an organization general expression of its overall purpose is known as it's among others. Ibrahim (2012) emphasized that the inclusion of items relevant to the themes being undertaken in an assessment instrument will help in measuring the specific objective more comprehensively.

Conclusion

Conclusively, the business studies placement test developed by the researcher is a test with high psychometric properties. As such, the test could be used for the selection of secondary school students who have the desire to go into the field of business studies in their senior secondary schools as well as an assessment tool for the evaluation of learning outcomes. The BSPT is a valid assessment instrument.

Recommendations

Based on the findings of the study, it is recommended that

1. Relevant educational agencies, teachers, researchers should endeavor to establish the validity of any instrument they develop forany educational purpose to ensure the items are valid and relevant to the subject objective.
2. Teachers, researchers, and relevant agencies should assess students for placement into the various field of study using placement test, students should be encouraged to choose their field of study based on their ability, interest not by parents' decision, teachers' choice, peer influence, subjects' area available in the school.
3. Nigeria Education Research and Development Council (NERDC) should develop a comprehensive guideline for placing students in the field of business studies among other fields in senior secondary schools.

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