



Self-Concept and Self-Efficacy as Determinants of Colleges of Education Students' Performance in Shorthand in North-East, Nigeria

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Abstract

The study examined the self-concept and self-efficacy as determinants of Colleges of Education students' performance in shorthand in North-East, Nigeria. The study had two specific objectives, two research questions which were meant to guide the study and two null hypotheses which were tested at 0.05 level of significant. The study adopted a descriptive survey research design which is purely quantitative, using structured questionnaires which were administered to 360 randomly selected Business Education Students of Colleges of Education in North-Eastern Nigeria. Data collected was analyzed using mean and standard deviations while a simple linear regression was used in testing the hypotheses. The findings of the study revealed among others that study strategy and attitude have significant and positive influence on Performance of Business Education Students in shorthand in Colleges of Education in North-East, Nigeria. Hence, the consistent failure of Business Education Students in Shorthand particularly in Colleges of Education in North-East, Nigeria can be reduced. The present study recommend that shorthand lecturers should encourage Business Education Students in Colleges of Education to develop a good study self-concept and positive self-efficacy towards shorthand as these will improve the students' Performance in the course and minimize the massive and consistent failure recorded among Business Education Students in shorthand. Specifically, in Colleges of Education in North-Eastern Nigeria.

Key word: Self-Concept, Self- Efficacy, Performance, Shorthand, Education, Determinants

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Introduction

Business Education being one of the major aspects of vocational education, impart practical oriented skills to the students so that they can be self-employed after graduation and contribute immensely to the world of work in the area of business enterprise (Okoro, 2018). Business education is an aspect of total educational programme which provides the recipient with knowledge, skills, understanding and attitude needed to perform well in the business world as a producer or consumer of goods and services (Abdullahi, 2017). Furthermore, Osuala (2012) opined that Business education is a broad area of knowledge that deals with a nation's economic

system and also identifies and explains the rate of business contentment and experience that prepare individuals for effective participation as citizens, workers and consumers.

Business education is an education for and about business, it combines both theoretical and practical knowledge, and it exposes recipients to the economic system of their country and equips them with lifelong skills that would enable them to make reasonable judgment as a producer (entrepreneur), employee or consumer of goods and services (Okoro, 2018). Okoro added that, business education curriculum comprises the following: Typewriting, Shorthand, book-keeping, commerce and office practice. The author also

stated that it is interesting to note that shorthand is a course, which forms part of the core courses of Business Education programme, it has the potentials of improving the vocational skills and academic performance of an average higher education Student. Shorthand is a symbolic method of writing rapidly with quick method of using symbols, by implications, shorthand is a mode of writing quickly with already learnt symbols (Adebusi, 2001). The author also asserted that the students, businessmen, journalists, verbatim reporters, doctors, nurses and other professionals have found shorthand relevant to the world of work. The relevance of shorthand in business education has been the concern of many people, especially secretaries, employers, professionals and non-professionals (Rhoda 2015). Furthermore, Anderson (2011) believed that shorthand skills will continue to be needed in business education and it is noteworthy that the purpose of training/development in business education is to enable students acquire the skills that will be relevant for their job performance and that every curriculum is expected to make beneficiaries apply the skills acquired in solving problems in the work place. Shorthand is a veritable tool, because it works through the medium of languages, its educative value can be seen in the area of temperament standard of work and attitude of the mind (Okoro, 2018). A sound knowledge of shorthand is essential to note taking, shorthand has the ability of molding life, it instills discipline by being careful when writing, it builds confidence into writers, and also, the knowledge of shorthand, no doubt, benefits vocabulary, reading, phonetics, spelling and other language skills, (Okoro, 2018).

In view of this, various researches that might enhance the academic Performance of students have been suggested. For instance, Silvia (2011) argued that student's self-concept is a very important factor that might contribute to students' academic Performance. Similarly, Cokley and Patel ((2007) maintained that students' self-concept is one of the student-related factors that can contribute to their academic Performance. On the other hand, Tenaw (2015) is of the opinion that attitude is one of the major factor that positively affects



the academic Performance of students. Similarly, Semukono and Arinaitwe, (2014) also affirmed that attitude is the strongest determinant of the academic Performance of students.

In view of the above arguments, the present study aims to examine the Influence of Students' Related Factors on Shorthand Performance among Colleges of Education Students in North East, Nigeria. Specifically, the study will focus on self-concept and self-efficacy. Study of self-concept refers to general perception every student has towards shorthand, and self-efficacy means students believe that they can successfully perform a given task in Shorthand.

Statement of the Problem

Shorthand is a core course and indispensable to the business education profession because it helps students to develop reading and writing abilities. More importantly, the knowledge of shorthand, is very essential especially in situations where the job demands secrecy in business or where a quick recording of information is necessary (Okoro, 2018). However, stakeholders (Heads of Departments and Exam Officers) in colleges of education in North-East, Nigeria observe that students are not performing well in shorthand and this is in line with what the following researchers (Baba, et al., 2018) reported that the Performance of Nigeria Certificate of Education (NCE) students in Shorthand has persistently remained discouraging over the years. The factors contributing to poor Performance of students in shorthand have not been completely addressed (Silvia, 2011). That is why prior studies which include Baba *et al*, (2018); Okoro, (2018); Rhoda, (2015); Silvia, (2011) recommended that further study on academic Performance of students in shorthand should involve student-related variables such as self-concept, and self-efficacy. Nevertheless, no published study was found to have focused on the influence of student-related variables on students' Performance in Shorthand. The present study therefore addresses this gap by examining the Influence of self-efficacy on Colleges of Education



Research Questions

1. What is determine the self-concept on Colleges of Education Students' performance in Shorthand in North-Eastern Nigeria?
2. What is determine the self-efficacy on colleges of Education Students' performance in Shorthand in North-Eastern Nigeria?

Null Hypotheses

The following null hypotheses were formulated to guide the study:

- Ho₁** Self-concept has no significant influence on Performance of Colleges of Education Students in shorthand in North-Eastern Nigeria.
- Ho₂** Self-efficacy has no significant influence on Performance of Colleges of Education students' in shorthand in North-Eastern Nigeria.

Literature Review

Theoretical Framework

The current study uses reciprocal-effects model and expectancy-value theory in underpinning the variables under investigation. The study uses reciprocal-effects model developed by Guay, Marsh, and Boivin (2003) to explain the relationship between Performance and self-concept. The model suggests that academic Performance and self-concept are related to each other. According to the reciprocal-effects model, the Performance of students is determined by their self-concept. This model is relevant to this study because, one of the variable of this study is students' self-concept and the model states that the Performance of students is determined by their self-concept. However, attitude and self-efficacy has not been captured by the reciprocal-effects model. Thus, another theory that is, expectancy-value theory, is used to underpin self-concept and self-efficacy. The expectancy-value theory was originally developed by Atkinson (1957; 1964) in an effort to study the individual Performance. Eccles (1983) extended this research work to the field of education.

According to expectancy-value theory, the Performance of students is determined by two factors, namely, expectancy and value. The expectancy is the confidence of individuals to succeed in their task, while the value refers to how individual perceives the usefulness and importance of that task to their live endeavour. Existing literature (Marsh et al., 2005) argued that the expectancy and value interact to predict important outcomes, such as academic Performance. The overall idea of expectancy-value theory is that beliefs and expectations have effect on subsequent action or behavior. Therefore, students' beliefs and expectations influence their subsequent action or behavior (Feather, 1988; Feather, 1992; Wigfield & Eccles, 1992). According to Pierce, et al., (2007), self-concept and self-efficacy are usually formed through beliefs. Therefore, students' attitude towards Shorthand and self-efficacy in shorthand can predict their Performance in the course. Hence, the theory is found relevant to this study.

Academic Self-Concept

Academic self-concept research is considered an important component of academic motivation (Cokley & Patel, 2007). Academic self-concept is comprised of a set of attitude, beliefs, and perceptions held by students about their academic skill sets and performance (John, et al., 2014). Academic self-concept, according to Cokley and Patel, (2007), encompassed a comparative component in which students assessed their academic attitude and skills in comparison with other students. Academic self-concept has been strongly linked to academic performance (Nalah, 2014). Previous research (Marsh, et al., 2005) in the context of education has considered academic self-concept as an important psychological construct because it has been found to be both a cause and an effect of academic performance in various field of study. A higher academic self-concept has been associated with greater academic performance among students (Cokley & Patel, 2007).

There has been a consistent effort on the part of self-concept researchers to develop several models to effectively explain and operationalize the construct of academic self-

concept. Historically, self-concept measurement, theory, research, and application emphasized a largely theoretical and global component of self-concept (Cokley, & Patel, 2007). The authors stated that the most recent models of academic self-concept have been based in a domain-specific perspective that supports a multidimensional view of self-concept. Self-concept had been viewed as a one-dimensional construct until Shavelson, et al, (1976) propounded a multidimensional, hierarchical model of self-concept, which was based on the early theories of James and Cooley (Manning, et al, 2006). The authors observed that the Shavelson model is comprised of a global self-concept, which is divided into academic (e.g., math, verbal, science) and nonacademic (e.g., social, physical, emotional) components, suggesting that self-concept is multifaceted, hierarchically organized, and becomes increasingly differentiated with age. Guay, et al., (2003) corroborated that as children become older, the rating of academic self-concept becomes more reliable and more stable. This claim was based on developmental psychological theory suggesting that, as children become older, they have an increased awareness of themselves and the world around them.

Concept of Self-Efficacy

According to Honicke and Broadbent, (2016), self-efficacy means having the ability to do what is desired, or to be effective in producing the desired result. Self-efficacy is also seen as peoples' beliefs that they can successfully fulfil a task or be successful in a job (Alay and Triantoro 2013). Self-efficacy affects persons' resistance against difficulties, choice of activities, and their efforts and performance (Loo, & Choy, 2013). Self-efficacy is defined as a belief in one's own abilities to perform an action or activity necessary to achieve a goal or task (Bandura, in Alay and Triantoro 2013). It is a future-oriented belief about the level of competence a person expects he or she will display in a given situation (Dian-Fu & Wei-Cheng, 2015). They also view Self-efficacy as the confidence that individual has in his/her ability to do the things that he/she strives to do. To them, Self-efficacy determines the tasks



employees choose to learn and the targets they set for themselves. In an academic setting, a student's self-efficacy for learning and doing vocabulary exercises in a reading class may be lower than usual because the teacher uses a grading curve and the student thinks the others are better in reading (Dian-Fu & Wei-Cheng, 2015). They believed that self-efficacy is believed to be related to student engagement and learning, and the role of efficacy in behavioral engagement is that students who do not have confidence in themselves are less likely to exert effort and more likely to give up quickly. According to them, if students are given practice and instruction on how to do schoolwork better, their performance can be developed. The quantity of effort, the quality of effort in terms of deeper processing strategies and a general cognitive engagement of learning has been linked to self-efficacy perceptions, and those who are efficacious use more cognitive strategies than the others, who have lower self-efficacy beliefs (Tabone, 2011). However, some students have strong efficacy and they do not use their cognitive engagement fully and they think their knowledge is appropriate and they are doing fine.

Bandura (1997) suggests that individuals first develop a sense of competence or efficacy at an activity. There is both theoretical and empirical evidence to suggest emotions can influence efficacy and efficacy beliefs impact emotions (Bandura 1997). He said that the increase in negative emotions most likely occurs because students with low levels of self-efficacy do not feel as if they can meet their goals and therefore become depressed. It is possible to say self-efficacy is positively related to adaptive motivational beliefs, like interest, value, and utility and to positive affective reactions and negatively related to negative emotions (Bandura 1997).

Methodology

A descriptive survey research design was used in this study to examine the variables under investigation. The geographical location where this study was carried out is North-East, Nigeria. The population of the study comprised 1789 NCE II Students of Business Education in Colleges of Education in the

North Eastern Nigeria. NCE II Students of Business Education were considered in this study due to the fact that the rate of failure in shorthand is higher among NCE II students compares to NCE I and NCE III (Musa, 2019, Rhoda, 2015). Hence, NCE II students were more appropriate for this study. The sample of this study comprised of 360NCE II business education students in colleges of education in North-East, Nigeria. A Simple random sampling technique was used in the present study. The measurement of two variables of this study were adapted from the previous studies (Adebule & Aborisade, 2014; Awang, Ahmad, & Ghani 2013; Louise,2013; Madalene, &Armenio, 2015). The two variables include; students' study self-concept (20 items), self-efficacy (20 items). The measurements of these variables were adapted based on the suggestion of Churchill (1979) that a researcher can adopt or adapt measurement from the existing studies relevant to the present research. In this study, the Likert scale was adopted for all the items of the four variables. This is because five scale is likely to produce better results than scale with no midpoint (Sorrel, 2010). Hence, the respondents were asked to indicate their responses to each question on a five-point likerts cale that is, 1 = Strongly Disagreed, 2 = Disagreed, 3 = Undecided, 4 = Agreed, 5 = Strongly Agreed. The research instrument was validated in order to ensure that the instrument used in this study met its validity, the instrument was validated by three experts (chief lecturers) in the School of vocational and technical education of Abubakar Tatari Ali Polytechnic Bauchi.

The reliabilities of the measurements of the two variables that were used in the present study (study self-concept and self-efficacy) were established by testing the internal consistency of the measurement items. This was done using Cronbach alpha because Cronbach alpha is used quite frequently as a technique of measuring the internal consistency of items (Keith, 2018). While the dependent variable of this studies (students' performance in shorthand) was established using Split-half method. To ensure the reliability of instrument of the present study, the pilot test was



conducted with 50 NCE students of Sa'adatu Rimi College of Education, Kumbotso, Kano state; and Federal College of Education, Pankshin, Plateau state. All the two colleges of Education are outside the study area but the respondents have similar characteristics with the sample of this study. The 50 students satisfied the recommended pilot test range from 25- 75 (Babbie, 1990; Converse & Presser, 1999). In the present study, the reliabilities of the instrument were assessed and the reliability coefficients of the three variables are; students' performance (0.73), study strategy (0.61), attitude (0.88). The results suggested that the instrument is reliable based on the recommendation given by George, et al., (2015). According to the authors reliability coefficient of at least .60 is considered satisfactory and acceptable. The data collected was analyzed using mean, standard deviation and simple linear regression. A simple linear regression is a statistical technique for testing the influence of one independent variables on one continuous dependent variable (Tabachnick & Fidell, 2013). Hence, simple linear regression was found appropriate in testing the hypotheses of present study. The benchmark of five points Likert scale is 3.0 (Okolocha & Nwadiani, 2015). Following their recommendation, any item of questionnaire with mean value of 3.0 and above was considered agreed while any item with mean value of less than 3.0 was considered disagreed. Additionally, any null hypothesis with a P-Value of 0.05 and below was rejected while any null hypothesis with a P-Value of above 0.05 was accepted.

Results

Research Question One

What is determine the self-concept on Colleges of Education Students performance in Shorthand in North-East, Nigeria?

The descriptive statistics analysis was carried out to ascertain mean response of the respondents concerning the variable self-concept. The statistical evidence documented in Table 1 shows that mean scores of all the items are above 3.0. While the grand mean of self-concept was found to be 4.34 with 1.281 as

standard deviation. Based on the guidelines given by Okolocha and Nwadiani (2015), the result implies that shorthand students in colleges of education in North eastern Nigeria agreed with all the statement of items



measuring their self-concept. But, to determine the influence of self-concept on performance of NCE students in shorthand table 3 (i.e., Regression Result) should be consulted.

Table 1: Descriptive Statistics of self-concept of NCE II Business Education Students of Colleges of Education in North-East, Nigeria.

S/N	Items	N	M	SD	Remark
1.	I can follow the shorthand lectures easily	319	4.84	1.65	Agreed
2.	I day-dream a lot in shorthand class	319	4.84	1.23	Agreed
3.	I am able to help my classmates in their shorthand work	319	4.84	1.23	Agreed
4.	I often do my shorthand homework without thinking	319	4.67	1.23	Agreed
5.	I work hard in shorthand for my further study.	319	4.76	1.22	Agreed
6.	I pay attention to the shorthand lecturers during lectures	319	4.84	1.22	Agreed
7.	Most of my course mates are smarter than I am in shorthand	319	4.67	1.29	Agreed
8.	I study hard for my shorthand tests	319	4.16	1.21	Agreed
9.	My lecturers feel that I am poor in my shorthand work	319	3.51	1.30	Agreed
10.	I am usually interested in my shorthand work	319	4.75	1.23	Agreed
11.	I often forget what I have learnt in shorthand	319	3.09	1.18	Agreed
12.	I am willing to do my best to pass all the shorthand courses	319	4.84	1.28	Agreed
13.	I get frightened when I am facing shorthand examination	319	4.35	1.21	Agreed
14.	I often feel like quitting school because of shorthand	319	4.51	1.18	Agreed
15.	I am good in most of my shorthand courses	319	4.59	1.10	Agreed
16.	I am always waiting for the shorthand lectures to end	319	4.43	1.44	Agreed
17.	Sometimes I do not perform good in shorthand tests	319	4.50	1.29	Agreed
18.	I do not give up easily when I am faced with a difficult question in shorthand	319	3.50	1.25	Agreed
19.	I do better than my friends in most shorthand tests	319	3.93	1.59	Agreed
20.	I am willing to put in more effort in shorthand studies	319	3.25	1.22	Agreed
Grand mean			4.34	1.28	Agreed

Note: N= Number of Respondents, M= Mean, SD= Standard Deviation

Research Question Two

What is determine the self-efficacy of Colleges of Education Students performance in Shorthand in North-Eastern Nigeria?

Descriptive statistics of all the items measuring the self-efficacy were calculated and the overall mean and standard deviation of students' self-efficacy is also computed and documented in Table 2. The statistical evidence disclosed that all the items are having a mean score of above 3.0. The mean scores of items measuring the

students' self-efficacy are ranging from 3.43 to 4.92. The variable also had a grand mean of 4.59with 1.315 as standard deviation. The grand mean is also above the benchmark of five points Likert scale. The result indicates that students of college of education agreed with all the statements of items measuring their self-efficacy. But, to determine the influence of self-efficacy on performance of NCE students in shorthand table 4 (i.e., Regression Result) should be consulted.

**Table 2: Descriptive Statistics of Self-efficacy of NCE II Business Education Students of Colleges of Education in North-Eastern Nigeria.**

S/N	Items	N	Mean	SD	Remark
1.	I ask questions in shorthand lectures	319	4.84	1.32	Agreed
2.	I respond to questions asked in shorthand lectures	319	4.43	1.29	Agreed
3.	I draw up a study plan in shorthand	319	4.92	1.36	Agreed
4.	I ask for help from my shorthand lecturers	319	4.43	1.28	Agreed
5.	I write up additional shorthand notes	319	4.76	1.31	Agreed
6.	I plan my time for shorthand examinations	319	4.92	1.37	Agreed
7.	I ask for help from my friends when I have issues in shorthand course	319	4.75	1.36	Agreed
8.	I produce my best work in shorthand examinations	319	4.08	1.38	Agreed
9.	I engage in academic discussions with my friends on shorthand	319	4.92	1.35	Agreed
10.	I provide feedback for my shorthand assignments	319	4.51	1.27	Agreed
11.	I explain subject matters to my course mates on shorthand	319	4.33	1.33	Agreed
12.	I make a good attempt to answer shorthand questions in advance	319	4.84	1.35	Agreed
13.	I meet the deadlines for my shorthand assignments	319	4.51	1.32	Agreed
14.	I make an attempt to meet the deadline for my shorthand group assignments	319	4.67	1.27	Agreed
15.	I pay attention during every lecture in shorthand	319	4.35	1.28	Agreed
16.	I express my opinion when I do not understand shorthand lectures	319	4.92	1.25	Agreed
17.	I feel nervous when I am doing shorthand presentations	319	3.43	1.26	Agreed
18.	I come forward to do shorthand presentations in group assignments	319	4.33	1.26	Agreed
19.	I feel confident that I can complete my shorthand studies within the stipulated time	319	4.27	1.25	Agreed
20.	I make sense of feedback on my shorthand examinations	319	4.51	1.35	Agreed
Grand Mean			4.59	1.31	Agreed

Note: N= Number of Respondents, M= Mean, SD= Standard Deviation

Hypotheses Testing

Hypothesis 1: Self-concept has no significant influence on performance of Colleges of Education students in Shorthand in North-East, Nigeria.

The statistical evidence documented in Table 3 presents the significant influence of self-concept on performance of Colleges of Education Students in shorthand in North-

Eastern Nigeria. The coefficient of determination R^2 value of .327 indicated a good model fit. This is in line with recommendation of Murphy, et al., (2014). The standardized coefficients beta value of .411, $p = .000$ indicates a positive significant influence of self-concept on shorthand performance of colleges of education students in North-East, Nigeria. Therefore, hypothesis 1 is rejected.



Table 3: Regression Analysis on the Influence of Self-concept on Performance of Colleges of Education Students in Shorthand in North-Eastern Nigeria.

Variable	Standardized Coefficients Beta	T Value	P Value	Decision
Self-concept	.411	8.018	.000	Rejected
R. square				.327
Adjusted r square				.324

Hypothesis 2: Self-efficacy has no significant influence on shorthand performance of colleges of education students in North-Eastern Nigeria.

The regression result documented in Table 4 reveals that the coefficient of determination R^2 value of .318 indicated a good model fit. This is in line with recommendation of Murphy, et al., (2014). The results presented in table 4 further suggest that, the influence of self-efficacy on performance of colleges of education students in shorthand in North-

Eastern Nigeria was positive and significant based on the standardized coefficients beta value of .406, $p = .000$. However, this result does not support the prediction of Hypothesis 4 which stated that self-efficacy has no significant influence on performance of Colleges of Education Students in shorthand in North-Eastern Nigeria. Furthermore, the result implies NCE students' self-efficacy also determines their performance in Shorthand. Hypothesis 2 is rejected.

Table 4: Regression Analysis on the Influence of Self-efficacy on performance of Colleges of Education Students in Shorthand in North-Eastern Nigeria.

Variable	Standardized Coefficients Beta	T Value	P Value	Decision
Self-efficacy	.406	7.921	.000	Rejected
R. square				.318
Adjusted r square				.316

Discussion of the Findings

Research Question 1 and its corresponding null hypothesis revealed that student self-concept has a positive and significant influence on the performance of Colleges of Education Students in Shorthand. This is in line with the study conducted by John, et al., (2014) on influence of students' self-concept on their academic performance in Elmina Township, Ghana. The study revealed that students' self-concept is perceived positively by students; and it directly predicts their academic performance. Similarly, the study conducted by Nalah (2014), revealed that a significant relationship exists between self-concept and academic performance of College of Education Students.

The findings of research question two and its corresponding hypothesis revealed a positive and significant influence of self-efficacy on performance of Colleges of Education Students in shorthand in North-Eastern Nigeria. The finding is consistent with the argument of the prior studies such as Honicke and Broadbent

(2016) who affirmed that self-efficacy influences students' academic performance. A similar finding was reported by Zuffianò, et al, (2013) in their study. In addition, Loo and Choy, (2013), reported a similar finding in the context of Singapore that, students self-efficacy directly predicts their academic performance.

Conclusion

The main purpose of this research work is to examine the influence of Students' related factors (study self-concept and self-efficacy) on Shorthand performance among Colleges of Education Students in Shorthand in North east, Nigeria. The present study proved empirically that self-concept and self-efficacy have significant and positive influence on shorthand performance of colleges of education students in north eastern Nigeria. Therefore, parents and Shorthand lecturers in colleges of education have to focus specifically on these students' related factors to reduce the massive and consistent failure recorded among Colleges of

Education Students in Shorthand and this will build confidence in students to take dictation with sufficient speed and accuracy.

Recommendations

1. College of Education management should encourage students to have a positive self-concept in Shorthand in order to improve their academic performance in the course.
2. College of education management and Shorthand lecturers should encourage Colleges of Education Students to always develop a positive self-efficacy in shorthand in order to improve their academic performance in the course.

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