

Self-Efficacy, Academic Buoyancy and Attitude towards Research among University of Ibadan Graduating Education Students

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Abstract

The study focused on the relationship among self-efficacy, academic buoyancy and attitude towards research among University of Ibadan graduating education students. The study employed a descriptive research design of correlational type. A sample of ninety seven male and female final year students was selected using the purposive sampling technique. Data were collected with the use of a questionnaire containing the General Self-efficacy scale by Schwarzer and Jerusalem (1995), the Academic buoyancy scale by Martin and Marsh (2008) and the Attitude Towards Research Scale by Papanastasiou (2005). The three scales yield internal consistency Cronbach alpha coefficients of 0.78, 0.84 and 0.73 respectively. The findings reveal that attitude towards research among graduating university students is positively related to their levels of self-efficacy ($r = 0.154, p < .05$) and academic buoyancy ($r = 0.084, p < .05$). Also, there is no significant difference in the attitude towards research of male and female graduating university students ($0.407 > 0.05$). It is recommended that self-efficacy and academic buoyancy among university students should be fostered through therapeutic interventions so that their attitude towards research can be improved on.

Keywords: *Self-efficacy; Academic buoyancy, Attitude towards research, University of Ibadan graduating education students*

Introduction

Attitude towards research in this study is conceptualised as graduating students' dispositions to statistics, research method courses and research projects execution as compulsory courses in their professional training. From earlier empirical studies and observations of final year students in the Faculty of Education, students do not view research methods

courses, statistics and project writing in a favourable way. Their attitude towards these areas of their training is rather poor, and does not show interest even in future endeavours. The implication of this is that if and when these students become teachers and lecturers, they will not impart the right knowledge and attitude on their students. For the graduates of education who will work in research institutes, and other spheres of life, the pattern of attitudinal disposition that they had as foundation may be displayed at their jobs. Attitude towards research, whether positive or negative might not be found to exist on its own in most cases, it might co-exist with other personal, psychological and contextual factors resident in or around individual university student. Attitude towards research can be described as an effective feeling and reply towards research (Hussain, Qayyum, Akhter, Abid & Sabir, 2016). The reported negative attitude of students towards research may affect academic confidence and the learning/achievement of other courses in the university. Attitude towards research among final year students may have links with their self-efficacy levels or levels of academic buoyancy. Fear of failure, negativity, stress, feeling ineffectively prepared or unable to do, and disinterest are described in the various studies concerning attitude towards research among university students (Hussain, et. al., 2016). Fraser (2009) distinguishes that students who juggle numerous aspects of living are particularly susceptible to deteriorating interest and lower confidence in undertaking study efforts. Life experiences of graduating university students may pose different challenges in their education and schooling, creating varied levels of confidence, beliefs and resilience in them. In the Faculty of Education, carrying out researches at the final year is an imperative facet of all prospective educators' professional training. The fundamental rationale of research project course in education curricula is to widen the expertise and capabilities of prospective educators, and to sustain focus and optimistic attitude towards research both on the university campus and in the larger communities.

This assertion nevertheless, does not neglect the fact that some psychological constructs might have some build up in the development and sustenance of traits of attitude towards research among university students. Negative/poor attitude towards research may spell doom for

students' academic engagement, confidence, lecturer-student relationship, academic outcomes, sense of independence, belief in one's ability and general feeling of worth and identity. Therefore, strengthening these variables in students generally could add to the level of positive attitude towards research especially. As viable as research methods, statistics and research efficacy are, sense of self-efficacy and level of academic buoyancy resident in final year students could go a long way in influencing positive or negative attitude towards research. Emphasising the importance of research, encouraging students, and providing a research friendly and supportive environment have been identified as increasing the research interest of students (Kirk & Rosenblatt, 1981; Pan & Tang, 2005; Secret et al., 2003). Research friendly and supportive environment could also be about supportive faculty members and research project supervisors who guide students and enhance the quality of their research works. Good research works and their outcome/reports and recommendations when put to use generally facilitate capacity building ventures which drive sustainable development in any society. Researches could drive the overall development and growth of any nation that keys into genuine researches. Ground-breaking researches are not done without keying into information and communication technology which are pivotal aspects of the fourth industrial revolution globally.

Many studies (Bandebe & Adebule, 2013; Papanastasiou, 2013; Munir, Bolderston, & Fcamrt, 2009; Ojo, 2007) have explored the attitude towards research and research methods courses among both undergraduates and post graduate students in universities and have found out that most students have negative attitudes towards research. This is probably because research has both theory and practice aspects, and it is laden with some detailed tasks like reading, comparing and contrasting literature, going out for field works getting data (primary and or secondary), analyses and interpretation and rigorous aspects of discussion and logical thinking. Learning ordinarily is a task, while research project writing, research methodology courses/training, and statistics add to the already tasking nature of learning especially at the final year. Research project execution may carry a message of fear appeal sometime, when advisors and supervisors do not handle students well and expect extra-

ordinary results from students whom they may not have engaged consistently in research education. This could induce a negative attitude towards research among graduating students, also considering time cost, money cost, and other sacrifices students make in research projects writing and execution. At the final year, many graduating students are agitated, anxious and uncertain about many issues. Two out of these issues are: grades and classes of degree issues, and facing the future after graduation. The fear of facing a future which many final year undergraduates consider uncertain might make them develop a negative attitude towards research and any other tasking course at the final year. There are gaps in literature in this line of research enquiry which might be responsible for the waning of research competences among university students. There is at present, contract project writing businesses, more of religious/denominational groups formations all over university campuses in Nigeria instead of formations of research groups, there are more ethnic/tribal groups than having students investigative journalism groups, little or no students pressure groups insisting on sustainable development from research/training. Generally nowadays, young people (including university students) are comfortable with the status quo instead of being interested in a new research-driven world order. From observation, the Nigerian society in general is not really a research-oriented one; research policies are not well put in place, and scientific methodology is not well-adapted to daily life. No society can develop if researches are not well carried out in terms of quality and quantity, and recommendations put to use by concerned stakeholders. There are possible psychological correlates of attitude towards research among university students (undergraduates). Two of them are self-efficacy and academic buoyancy. There is a dearth of empirical researches in the area of confirmation of significant relationships among self-efficacy, academic buoyancy and attitude towards research. This present study therefore, aims to examine the relationships among the variables of interest in this study.

Self-efficacy

Self-efficacy is defined as an individual's judgment or beliefs about his/her capability to successfully carry out a specific task or perform certain

behaviours. Bandura, Barbaranelli, Caprara and Pastorelli (1996) contend that self-efficacy can influence a person's life in diverse ways. According to Bandura (1997), self-efficacy is defined as self-judgment about his/her capacity to manage successfully by organising required activities in order to display his/her performance. Zimmerman (2000) opines that students with high self-efficacy are eager to learn and are persevering and show more resilience to tackle problems. Bandura (1997) states that self-efficacy is the main construct in social learning theory and described it as the disposition of an individual that impels his/her to be successful in specific ventures (Bandura, 1997; Zimmerman, 1995). According to Bandura, self-efficacy affects the way people think, feel and motivate (Bandura, et. al., 1996). Erdem (2015) contends that self-efficacy is determinative of the levels of endeavouring and being persistent of a student under conditions.

The four sources of self-efficacy are experience, like being successful or unsuccessful; emotional and physical conditions, like fear, excitement, observing others; experiencing, and witnessing success; and verbal conviction of family, friends and colleagues (Bandura, 1997). Self-efficacy beliefs are fed from these sources and affect the performance, exertion of power and the individual's struggles to succeed (Kuchkyilmaz, & Duban, 2006).

Students who are confident about their research skills and competences expect high grades after project execution and defence, and look forward to a future which is achievements-filled. Bandura (1977) emphasises that success is not only related to the required skills of a student to do the work, but also to the need of self-compliance along with the skills. Research is methodological, it is not done haphazardly, and so students must follow the sequence of research steps in order to arrive at a logical conclusion and contribute to knowledge. To successfully do researches as a graduating student, there must be strong belief in one's capability and rising above challenges and setbacks that present themselves in the course of doing a research work.

Academic Buoyancy

Academic buoyancy is the ability to withstand and respond successfully to the types of challenges and setbacks associated with routine school

life, such as competing deadlines, examination pressure and poor grades (Martin & Marsh, 2008a). For graduating students, deadlines would also include research proposals and research projects submission and defence deadlines. Academic buoyancy is distinct from academic resilience, which can be defined as “a student’s capacity to overcome acute or chronic adversities that are seen as major assaults on educational processes.” (Martin & Marsh, 2009, p.353). Academic resilience has to do with means to an end in the educational pursuit, while academic buoyancy talks about specific routine activities within the educational endeavours such as formative assessments (assessment for learning or continuous assessment tests), summative assessment (assessment of learning or examinations), projects, field trips, practicum, seminar presentations and turning in of term papers. Academic buoyancy is relevant to the majority of students and is relevant to everyday academic challenges such as examination pressures, whereas academic resilience is relevant to a minority of students (e.g. school refusers) and is relevant to more extreme, adverse experiences such as being bullied (Martin & Marsh, 2009). According to Martin, Ginns, Brackett, Malmberg and Hall (2013), the distinction between the two concepts has been demonstrated empirically. For example, buoyancy correlates more strongly with low-level negative outcomes such as academic anxiety, uncertain control and failure avoidance, whereas resilience correlates more strongly with more severe negative outcomes such as disengagement from schooling (Martin et. al., 2013).

Academic buoyancy is positively related to a range of adaptive educational outcomes including enjoyment of school, class participation, academic self-efficacy, planning, persistence, control and low academic and test anxiety (Martin et. al., 2013; Martin & Marsh, 2008a; Martin, Colmar, Davey & Hall, 2010; Putwain, Connors, Symes & Douglas-Osborn, 2012; Putwain & Daly, 2013). Adaptive educational outcomes such as attitude to statistics and research methods as a course and as a project work could be related to academic buoyancy because, when students are academically buoyant, they are more likely to weather any academic storm and develop positive attitude towards any specific aspects of their schooling, including research.

Attitude towards Research

Attitude connotes a behavioural predisposition towards an object, a situation, a person, or an event, either to like or dislike such. Attitude can be developed from experience or natural preferences or learnt from social intercourses in the environment. According to Bandele and Adebule (2013), some researchers like Aborisade (2008), Adebule (2002), and Idu (1988) indicate many but similar patterns of attitude formation, that the main sources of attitude include assimilation from the environment, emotional effects of certain kinds of experiences and direct intellectual processes. Research drives creativity, innovation and sustainable development, it also points to areas of needs of a society in the nearest future. Research work demands clear understanding of what is to be done, it methodical, it needs structured effort and skills from final year students. It builds on existing data, which require adequate use of textbooks, journals and library facilities (Bandele & Adebule, 2013). Educational research is conducted to increase human knowledge, solve contemporary problems, create basis for decision making, make new discoveries, enhance contemporary status evidence, aid educational innovations and improve educational services (Bandele, 2004). However, Ojo (2007) observes that there are symptoms of downward trend in research performance and that the gold standards of excellence that were explicitly sought by elitist universities have gradually been compromised. Studies have shown that attitude has strong influence upon behaviour, kinds of satisfaction and value which individuals choose (Idu, 1988).

Reynolds and Walberg (1992) acknowledge that attitude had a significant force on educational attainment of students. Though, contradictory to this argument, there were other researchers disagreeing that attitude of students might not be consistent to educational attainment (Hung, 2005). Research showed that students typically tend to view research-related courses with negative attitudes and feelings (Munir et al. 2009; Papanastasiou, 2005).

One of the main problems of these negative attitudes is that they have been found to serve as obstacles to learning (Papanastasiou, 2005). Rezaei and Zamani-Miandashti (2013) submit that students' attitude influences how they mentally approach research including all the work

related to that research. According to the authors, a positive attitude enables students to solve the problem quickly whereas; a negative attitude hampers the efforts in research. A research inquiry into correlates of attitude towards research, especially self-efficacy beliefs and levels of academic buoyancy could assist in knowing how to improve students' attitude towards research when these psychological correlates are strengthened. The strength and direction of psychological correlates of attitude towards research when explored and studied could point future empirical researches to the areas of need in terms of interventions, so that positive attitude towards research could be fostered among undergraduates. Research skills and competencies among undergraduates would rub off on other courses they take in the university and even on endeavours outside education and schooling. This study, therefore aimed at exploring the possible links attitude towards research might have with self-efficacy and academic buoyancy.

Statement of the Problem

There is a dearth of empirical researches in educational psychology and related fields on the relationship among the three constructs. This has hampered necessary recommendations needed to be made and utilized in order to boost research skills, knowledge and competences among university students. Even, research efficacy which is a domain specific self-efficacy construct could be fostered among university students when studies like the present one are conducted on our university campuses. When undergraduates are not self-efficacious, there are so many consequences for their academics and general life functioning ranging from low academic confidence, low quality of school life, wrong choice of career, low level of learning effectiveness, to lack of self-development. Students who are not academically buoyant might record low academic outcome, poor social competence and low motivations in life. Poor attitude to research might result in general negative attitude towards overcoming challenges in life because aptitude in the school system could connote high functioning in the future endeavours in the society. It is in view of these that this study seeks to examine the relationship among self-efficacy, academic buoyancy and attitude towards research among University of Ibadan graduating education students.

Hypotheses

The following directional null hypotheses were formulated and tested in this study at 5% level of significance:

Ho1: There is no significant relationship between the independent variables (self-efficacy and academic buoyancy) and attitude towards research among graduating university students.

Ho2: There is no significant difference in attitude towards research between male and female graduating university students.

Methodology

Design and Participants

This study adopted the descriptive research design of correlational type. The researcher did not manipulate any of the variables in the study. The relationship among variables, and significant difference between participants were studied as they existed in the participants as at the time of the study. The participants comprised of final year (graduating) university students in the University of Ibadan, Ibadan, Nigeria, specifically in the Faculty of Education.

Sample and Sampling Technique

The sample for the study consisted of ninety seven male and female final year students (graduating) from the population of two hundred and eighty-one. The participants were drawn from the Faculty of Education, University of Ibadan. One hundred questionnaires were administered in total, but only ninety-seven questionnaires were correctly filled and found suitable for analyses. The sample was drawn using the purposive sampling technique to select only final year students from the Faculty of Education, excluding special students from the Department of Special Education and Rehabilitation Sciences. The participants were captured during a general (Faculty) lecture, involving students in all the seven departments: Teacher Education (Arts and Social Sciences Education, Science and Technology Education and Early Childhood Education), Guidance and Counselling, Special Education and Rehabilitation Sciences, Library, Archival and Information Studies, Adult Education, Educational Management and Human Kinetics and Health Education. The consent

of the participants was sought before giving them the questionnaires to fill. Questionnaires were given to students who were willing and patient enough to fill the questionnaire on the spot after their lecture.

Instrumentation

Data were collected with the use of a Questionnaire titled Self-efficacy, Academic buoyancy and Attitude towards Research Questionnaire, and it contained three sections. Section A consisted of Demographic information only about the respondent's Gender. Section B contained: the General self-efficacy scale by Schwarzer and Jerusalem (1995). The scale is a self-report measure of self-efficacy, with 10 items. Internal reliability for GSE = Cronbach's alpha between .76 and .90., in the present study the scale yields an internal consistency of .78; the Academic buoyancy scale by Martin and Marsh (2008) comprising of four items, with response rates ranging from 1-Strongly Disagree to 7- Strongly Agree, the scale yields an internal consistency of 0.84 in the present study; the Attitude Towards Research Scale by Papanastasiou (2005), it contains 28 items which are divided into five factors: research usefulness, research anxiety, positive attitudes, relevance to life, and research difficulties, with five-point Likert style response categories. The scale yields an internal consistency reliability coefficient of 0.73 in the present study. All the scales used in the study were adopted.

Method of Data Analysis

Data collected for this study were analysed using the Pearson's product moment correlation and T-test analyses at 0.05 level of significance.

Results

Ho1: There is no relationship among self-efficacy, academic buoyancy and attitude towards research among graduating university students

Table Descriptive statistics and correlations among variables

	Mean	SD	1	2	3
Attitude towards research	1.11	27.43	1.000		
Self-efficacy	24.26	3.02	.154*	1.000	
Academic buoyancy	13.31	.93	.084*	-.138	1.000

The table showed the correlation matrix of the relationship among the independent variables (self-efficacy and academic buoyancy) and attitude towards research. It was observed that self-efficacy ($r = 0.154, p < .05$); and academic buoyancy ($r = 0.084, p < .05$) had positive significant relationship with attitude towards research.

Ho2: There is no significant difference in attitude towards research between male and female graduating university students

T-test summary table showing significant difference in attitude towards research between male and female graduating university students

	N	Mean	Std	Df	T	P
Male	45	7.08	1.27	95	0.407	>0.05
Female	52	8.10	2.15			

The table showed that there was no significant difference in attitude to research between male and female undergraduates ($0.407 > 0.05$).

Discussion

The first hypothesis stated that there is no significant relationship between the independent variables (self-efficacy and academic buoyancy) and attitude towards research among graduating university students. This hypothesis was rejected because results revealed that self-efficacy ($r = 0.154, p < .05$) and academic buoyancy ($r = 0.084, p < .05$) had positive significant relationship with attitude towards research. This indicates that the higher the self-efficacy beliefs and academic buoyancy of graduating university students, the more positive their attitude towards research is. The probable justification for this result is that as tasking and challenging as research is, self-confidence, high spirit, efficacy and beliefs in one's

ability could make a final year student face any academic work and record good outcomes. Graduating students have come a long way in their academic journey, so they must have achieved some feats in their endeavours, they could draw that efficacy belief in the past experiences and have faith that they can do it again when it comes to research and research-related tasks. Again, when students are academically buoyant, they tend to face any challenges with optimism, and courage, surmounting those challenges. Academic buoyancy of final year students must range between fairly good and excellent for them to advance up to the final year, thus they would be able to tackle any further challenging tasks as they had been tackling academic challenges and overcoming them.

This finding is in line with that of Davari, Danesh Kazemi, Aghili, and Mozafari (2015) who confirms that there was a significant and positive relationship between the overall scale of self-efficacy and research performance of college Dental students. Regarding the association of self-efficacy in research with research performance of dental students, it can be stated that awareness of the level of self-efficacy in research can lead to better planning for improving the research performance (Davari, *et. al.*, 2015). Also, Shirbagi (2011) confirms that university postgraduate students' attitudes to research had a positive relationship with their research self-efficacy. Shirbagi (2015) also confirms that in term of self-efficacy, male students were more efficacious than the female students, while female postgraduate students are less concerned about the difficulties of research than their male counterparts.

Hypothesis two stated that there is no significant difference in attitude towards research between male and female graduating university students. The results showed that there was no significant difference in attitude towards research between male and female undergraduates ($0.407 > 0.05$). Thus this hypothesis was accepted. This finding connotes that male and female graduating university students do not differ in their attitudes towards research. This further means that being a male or a female student does not matter in the development and sustenance of either positive or negative attitude towards research in the university. The probable reason for this finding is that attitude as a psychological trait does not have gender preferences for universal issues like statistics,

research methodology and research among students. All students face the rigours of research equally, have the normal students' dispositions towards academic tasks, even though they may have different coping mechanisms.

The finding of this study corroborates the finding of Bandele and Adebule (2015) which confirms that the patterns of graduating students' attitude towards research work irrespective of the gender are very similar. Also, the findings support that of Ojo (2007) who submits that there was no significant difference in the mean dispositional scores of male and female graduating students to research. The finding of this study also corroborates that of Davari, *et. al.* (2015) which confirms that there was no statistical significant difference between the overall mean score and the score of seven parts of self-efficacy in research and research performance, in terms of sex (gender).

Conclusion

It is concluded from this study that, the higher the levels of self-efficacy and academic buoyancy resident in University of Ibadan graduating education students, the more positive their attitude towards research. Also, being a male or female graduating student does not influence attitude towards research. There is no gender difference in attitude towards research among graduating university students.

Limitation of the Study

Although the sample used in this study is small somewhat, only ninety seven University of Ibadan graduating education students out of the population (two hundred and eighty-one). Nevertheless, the finding of this study is still adjudged to be valid.

Recommendations

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

1. University students need psychotherapeutic interventions in the area of self-efficacy training (including research efficacy) and ego bolstering. That 'can do' spirit needs to be geared up in undergraduates in the area of research and in other aspects of their professional training.

Faculty members who are counselling psychologists should assist in this area.

2. Resilience and academic buoyancy should be encouraged and fostered among university students, so they can rise above limiting challenges and excel no matter the setbacks encountered in the course of their educational pursuits.
3. Research fora, workshops, symposia, conferences and seminars should be organised by the Faculty (lecturers) to inspire university students' interests in research projects and increase positive attitude towards research.

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