Self-Efficacy as A Determinant of Academic Resilience among Postgraduate Students

Isaiah I. Olodude
Obafemi Awolowo University, Ile-Ife, Nigeria.

Ajibike O. Anuodo
Obafemi Awolowo University, Ile-Ife, Nigeria.

Olumide M. Owoeye
Bowen University, Iwo, Nigeria.

Corresponding Author – Ajibike O.Anuodo (ajibikeanuodo@gmail.com)

Abstract

Academic resilience is a vital measure of training and performance which in turn help students in accomplishing great instructive results notwithstanding the circumstances. It is widely believed that previous success raises self-efficacy and belief in one's abilities and thus leading to resilience. Our study investigated the level of academic resilience among postgraduate students of Obafemi Awolowo University, Ile-Ife and examined the extent to which postgraduate students' self-efficacy could determine their academic resilience. The study adopted a descriptive survey research design. The population of the study comprised all postgraduate students of Obafemi Awolowo University, Ile-Ife, Osun State. The sample consisted of 581 postgraduate students who were selected using the multistage sampling procedure. Two research instruments: Academic Resilience Scale (ARS) and General Self-efficacy (GSE) were used to elicit information from the students. Percentages and linear regression were used to analyse the data. The results showed that 22.9%, 62.8%, 14.3% of postgraduate students of Obafemi Awolowo University demonstrated low, moderate, and high levels of academic resilience respectively. The results also showed that self-efficacy significantly influenced academic resilience of postgraduate students at ($\beta = 0.244$, F= 34.73, p<0.05). The study concluded that self-efficacy was capable of enhancing academic resilience of postgraduate students in Obafemi Awolowo University, Ile-Ife.

Keywords: Academic Resilience, Self-efficacy, Postgraduate Studies

Introduction

Learning is increasingly driven by assessable aims and purposes. As such, students are made to meet criteria already set for them by the institutions where they learn, or by the high entry requirements established by higher institutions of learning. Because of this, students use a major total of time of their school life on challenging educational activities that they hope would make them achieve their academic aims. In the process, they might probably get emotionally and physically tired. These students also who come to school with conviction in their ability to produce a good result, are determined to attain their academic objectives. However; while some students may find it easy to do well probably

because they have academic resilience, some students might find it challenging to make it perhaps for the reason that they lack academic resilience.

Abiola & Udofia (2011) established that resilience is associated with extended personal fulfilment, efficient wellbeing and resourceful capability amid difficulty. According to Jensen, Trollope, Waters and Everson (2008), resilience is a progressive method and effective approach that one employs in reaction to stressors. Although students experience the same challenging or hostile conditions, academically resilient students can turn demanding happenings into prospects for personal development and benefit. Therefore, they possess the capacity for stressful adaptation, and their responses to difficulties do not weaken their capabilities, as an alternative, they bounce back with greater abilities (Santhosh & James, 2013). This suggests that academically resilient students are likely to withstand challenging circumstances that put them at risk of doing poorly in their academics and perform well in their studies.

Several postgraduate students appear to be weighed down by problems and difficulties in their search for knowledge. For example, finding suitable research topics takes some postgraduate students up to one semester. In their pursuit for knowledge, students are faced with meeting submission deadlines including submission and processing of various postgraduate forms. Postgraduate students come across problems in their pursuit to satisfy their inquisitiveness, they explore, discover and tend to find answers to logical tasks, others do not have a cordial relationship with their lecturers; they are scared of relating with their lecturers to learn new things and get information that might most likely help them. In higher institutions, academic resilience plays a vital role in their academic success. It is assumed that the academic life of postgraduate students is filled with high and rigorous demands which students must overcome to achieve academic success. Success at universities may be expressed in a variety of ways depending upon the individual's self-perception of their abilities. However, frequently believed explanations of academic attainment may include: completion of

a degree, satisfactory grade point, average and low retention of the profession and life skill sets necessary for employability and skilled improvement. This success can only be realized by students who portray great academic self-efficacy. Such student braces up to meet the academic rigour, and excel in school-learning activities because he or she distinguishes himself or herself as having the ability to do well in school. Also, some postgraduate students may have financial challenges in the course of the programme; they are not able to continue their programme because they have not been able to pay their tuition fee. Some students are yet unemployed and have because of their age gained independence from their parents, and therefore have to struggle to source for funds. In the case where these funds are not forthcoming, they are discouraged and it could make them want to drop out from the programme while some others tend to overcome these challenges by looking for alternatives which could help them apart from abandoning the programme; probably by requesting for a leave of absence which could give them time to be able to source for the money they will need for their tuition fee just so that they can continue their programme and advance. It may be that quite many postgraduate students need self-fulfilment, growth, and use of potentials. Academic resilience implies students achieving great educational outcomes.

Academic resilience implies students accomplishing great instructive results notwithstanding circumstance. The concept of perceived self-efficacy reflects the committed self-belief that an individual can accomplish new or demanding duties and achieve desired results (Bandura, 1997). It involves the ability to deal with difficulty, stress or pressure in academic situations. For this reason, developing resilience is an imperative task as it is how individuals overcome challenges and face demanding experiences. Besides, by developing resilience, persons can cultivate lasting abilities such as communication and problem-solving aptitudes, and the facility to make accurate plans and be capable of taking the periods needed to follow through with them. Academic resilience could be understood as an adaptation given the right means. Likewise, students with high self-efficacy

are likely to be audacious to face difficulties and they see challenges as a prospect to develop themselves and become improved persons in life, which means they tend to think about ways of refining themselves notwithstanding challenges they come across while students with low academic resilience tend not to have the ability to endure challenges; which further entails that they have the propensity to evade difficulties. They see challenging activities to be threatening, stay away from demanding circumstances, tend to adjust less practically to stressors, and might possibly think in unbearable ways towards themselves since they tend to assume more concern for their displeasure than for their achievement.

Bandura (2001) defines self-efficacy as a belief in one's ability to establish and implement the development of action necessary to create given achievement. He established self-efficacy as one's conviction to effectively perform a course of achievement required to attain the anticipated result. A strong sense of self-confidence, for example, may serve students well when writing an essay because it prompts interest in and attention to writing. Confident students are also likely to feel less apprehensive and have a resilient feeling of self-worth about their writing. Lennon (2010) suggested that the field of self-efficacy study is equally integrated in terms of how the theory is defined by diverse scholars. Setting the basis of inquiry regarding the social cognitive model, Bandura (2000) stated, students' beliefs about their abilities to effectively complete responsibilities, or self-efficacy beliefs, are solid predictors of their competency to achieve such tasks. Self-efficacy refers to a person's belief in his/her capability to form and execute a vital course of accomplishment to attain a wanted outcome (Bandura, 2006). Once a person does not know one's skill to do something, he/she will not endeavour to do it. Self-efficacy is the extent of one's personal aptitude to complete responsibilities and reach objectives (Ormrod, 2006).

Studies among American students indicate a positive correlation between academic resilience and academic achievement. A study by Gonzalez

and Padilla (1997) examined the factors that contributed to academic resilience and achievement of 133 resilient and 81 non-resilient Mexican American High school students. From a population of over 2000 Mexican American students from three high schools in California, they identified "resilient students" as students who reported that their grades so far in high school were "Mostly A's". Those students who reported that their grades in high school were "Mostly D's" or "Mostly below D's" were regarded as non-resilient. Similar results had been reported in an earlier study by Alva (1991) on a cohort of tenth grade Mexican American students. In a series of studies conducted by the US Department of Education by Waxman, Padron, Gray (2004), students who ranked in the 90th percentile on the standardized tests in Mathematics were highly resilient, reported significantly higher levels of task orientation and satisfaction, social self-concept, achievement motivation, and academic self-concept than their counterparts who ranked below the 10th percentile. Similarly, in a longitudinal study among students in California, (Hanson & Austin, 2003) the highest increase in test scores occurred in schools where students reported high levels of resilience. In the above studies, resilience development proved to be equally beneficial for later test score improvements in both low and high performing schools.

A study among urban high school students (Wasonga, Christman, & Kilmer, 2003) examined the factors predicting resilience and academic achievement. A 56 item self-reported resilience questionnaire was used to collect data on a sample of 480 high school students. The authors used regression analysis to select factors that best predicted respondents' resilience and academic achievement from protective factors. The findings revealed that the models predicting academic achievement from protective factors were all significant and positively related to academic achievement. In another study (Reis, Colbert & Hebert, 2005), 35 high school freshmen and sophomores were involved in a three-year qualitative case study. The study sought to determine what factors high achieving students attributed to their resilience and what factors may contribute to the inability to display

resilience in underachieving students. At the end of the study, 17 of the academically talented participants had become underachievers while 18 continued to do well and had developed resilience. The authors argued that protective factors such as personal characteristics of sensitivity, independence, determination to succeed, appreciation of cultural diversity, inner will, strong support systems at school and home, participation in special programmes, participation in extracurricular activities and challenging classes appeared to be present in the 18 high achieving students. The high achieving students were further assisted by support systems at home and school, participation in extracurricular programmes, challenging classes and a positive outlook. On the contrary, the underachievers saw school as boring, had a negative interaction with teachers and peers, lacked parental support and monitoring, and interacted with inconsistent role models, faced sibling rivalry and inappropriate parental expectations.

In a study conducted among 402 high school students in grades 11 and 12 in two high schools in Australia by Martin & Marsh (2006), resilience correlations were computed between resilience and behavioural outcome in school. Academic resilience had positive correlations with planning, control, self-efficacy, persistence and low anxiety. Besides, academic resilience predicted three educational outcomes: self-esteem, participation, and enjoyment of school. However, despite the significance of self-efficacy and academic resilience on students' academic performance, not much research has been done on the extent to which self-efficacy can influence postgraduate students' academic resilience.

The main purpose of the study is to investigate the extent to which self-efficacy can influence academic resilience among postgraduate students of Obafemi Awolowo University. The specific objectives of the study are to:

a. investigate the level of academic resilience of postgraduate students of Obafemi Awolowo University, Ile-Ife;

b. examine the extent to which postgraduate students' self-efficacy can determine academic resilience;

Methods

Participants

The population for the study consisted of postgraduate students of Obafemi Awolowo University, Ile-Ife, Osun State. According to the information received from the Postgraduate College, there were 2,339 postgraduate students in the University as at the commencement of 2016/2017 academic session out of which 1,300 were male and 1,039 were female. There are also 13 faculties and 76 departments in the university. The sample size comprised of 600 postgraduate students using a multistage sampling procedure. At the first stage, six faculties were selected using a simple random sampling technique. At the second stage, five departments were selected from each of the selected faculties using purposive sampling technique based on the availability of postgraduate students. At the third stage, twenty students were selected from each of the departments using a convenience sampling technique. The postgraduate students selected from each faculty formed the sample for this study. The demographic variables of the respondents are presented in Table 1.

Table 1 shows the socio-demographic information of the respondents used for the study. It shows the six faculties used for the study with their sample size and percentage respectively. Out of 600 questionnaires administered, 581 were found to be useful. 386 masters, 80 PGD students, 44 Mphil students and 71 PhD students participated in the study as shown in the table. The age range of the students showed that 103 respondents between ages 21-25 years (17.7%), 170 of them were in the range 26-30 years (29.2%), 257 students were between 31-35 years and 51 students were 36 years and above, (n) represented a total number of students that participated in each faculty while N (581) represented the overall total of all the postgraduate students that participated in the study.

Table 1: Socio-Demographic Information of the Respondents

Variables	Level	Frequency	Percentage
Faculty	Education	97	16.7
	Science	97	16.7
	Arts	98	16.8
	Social Sciences	96	16.5
	EDM	98	16.8
	Technology	95	16.3
	Total (N)	581	100.00
Programme	PGD	80	13.7
	Masters	386	66.4
	Mphil	44	7.5
	PhD	71	12.2
	Total (N)	581	100.0
Age	21-25yrs	103	17.7
	26-30yrs	170	29.2
	31-35yrs	257	44.2
	36yrs and above	51	8.7
	Total (N)	581	100.0
Sex	Male	281	48.3
	Female	300	51.6
	Total (N)	581	100.0

Source: Field Work 2018

Measures

Academic Resilience Scale

Academic Resilience Scale (ARS) consisted of 16 items which were adapted from the work of Martin and Marsh (2006), where it consisted of 20 items originally. This implied that 4 items were dropped after validation because they were not reliable. The respondents were asked to tick the option that best applies to them. The items were rated on the rating scale four-point Likert rating scale ranging from Always (A), Sometimes (S), Rarely (R), Never (N), which were coded 4, 3, 2, and 1 respectively. This scale was designed to measure the level of student's academic resilience in school. It was administered on 378 high school students of Turkish High School in Turkey. The items were rated on a seven-point Likert scale with the anchors ranging from "not true of me at all" to "extremely true of me".

The psychometric evidence of this measure was positive. The internal consistency reliability for the ARS scale ranged between 0.83 and 0.86 which is above the generally accepted cutoff of 0.70 for exploratory research (Hesson, 2001). Test-retest coefficients showed that the ARS scale was stable ($r=.82$). Some items from this instrument were modified to fit the study and for easy understanding by the respondent.

General Self-Efficacy Scale

General Self-Efficacy scale contained 10 items which were adapted from the works of Schwarzer, and Jerusalem (1995), where it contained 10 items originally. The respondents were asked to pick only one option that best described their opinion on each item. The items were rated on the rating scale of four-point Likert rating scale ranging from Not at all true, hardly true, moderately true, exactly true which were coded 4, 3, 2, and 1 respectively. It was used to assess a general sense of perceived self-efficacy among adolescents and adults. The internal consistency ranged from 0.76 to 0.90. The scale

format took on a four-point Likert scale ranging from Not at all true, hardly true, moderately true, Exactly true. The items were modified and simplified for easy understanding by the respondents.

Results

Research Question: What is the level of academic resilience among postgraduate students of Obafemi Awolowo University?

To answer this question, sampled respondents' responses to Section B items of the instrument were scored and the scores were used to determine the level of students' academic resilience. On the scale, the minimum score obtained was 28, the maximum score was 59, with a mean score of 40.55 and Standard Deviation score of 5.48. On the scale, scores within the range of 45 and 59 were termed "high academic resilience", score from 35 to 44 was termed "moderate academic resilience", while scores from 28 to 34 were termed "low academic resilience". The descriptive result is presented in Table 2

Table 2: Level of Academic Resilience among Postgraduate students of Obafemi Awolowo University

Academic Resilience	Frequency	Percentage
Low Academic Resilience	61	10.5
Moderate Academic Resilience	423	72.8
High Academic Resilience	97	16.7
Total	581	100.0

Results in Table 2 shows the level of academic resilience demonstrated by Obafemi Awolowo University postgraduate students. The results show that only 61 students making 10.5% possessed a low level of academic resilience, while 423 of the respondents representing 72.8% had a moderate level of academic resilience, 97 respondents representing 16.7% possessed a high level of academic resilience.

Research Hypothesis

Hypothesis 1: There is no significant influence of self-efficacy on academic resilience of postgraduate students.

To test this hypothesis, regression analysis was carried out on the collected data using academic resilience as the dependent variable and self-efficacy as an independent variable. The result of the summary model is presented in table 3.

Table 3: Model Summary Table of the Influence of Self-efficacy on Academic Resilience of Obafemi Awolowo University Postgraduate Students

Model	R	R^2	ΔR^2	SE	F	p
1	.238[a]	.057	.055	5.32704	34.727	.000

a. Predictors: (Constant), Self-efficacy

Table 3 shows the model summary of the influence of self-efficacy on Obafemi Awolowo University postgraduate students' academic resilience. From the table, the R Square value obtained was 0.057, while R Square Adjusted was 0.055. This can be interpreted to mean that the maximum value self-efficacy can account for on academic resilience of Obafemi Awolowo University postgraduate students is 5.7%, while the minimum value it can account for is 5.5%. Moreover, the model is significant at 0.05 level of significance since the p-value is less than 0.05 threshold. To determine the magnitude of the influence of self-efficacy on Obafemi Awolowo

University postgraduate students' academic resilience. The result is presented in Table 4

Table 4: Coefficient of the Strength of Influence of Self-efficacy on Academic Resilience of Obafemi Awolowo University Postgraduate Students

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	p
1	(Constant)	32.961	1.306		25.233	.000
	Self-efficacy	.244	.041	.238	5.893	.000

a. Dependent Variable: Academic Resilience

Table 4 shows the coefficient of the strength of influence of self-efficacy on Obafemi Awolowo University postgraduate students' academic resilience. From the table, self-efficacy was found to wield a positive influence on students' academic resilience. The B-value was 0.244 with t-value of 5.893 which is significant at 0.05 level ($p < 0.05$). The implication of this is that a unit increase in students' self-efficacy leads to a unit increase in the academic resilience, or, the higher/better their self-efficacy, the higher/better their academic resilience.

Discussion

The primary goal of this study was to determine the influence of self-efficacy as a determinant of academic resilience among postgraduate students of Obafemi Awolowo University, Ile-Ife. The first findings of this study revealed that the greater part of the students possessed moderate/average level of academic resilience. The total number of students with moderate academic resilience was more than half, the difference between the number of students with moderate level and the number of students with a low and high level of academic resilience was relatively significant. This finding is consistent with the findings of Mwangi, Okatcha, Kinai & Ireri (2015) whose study is on Kenyan students' academic resilience.

According to their findings, a greater percentage of the respondents demonstrated a moderate level of academic resilience. Another study conducted by Sharkey, You and Schnoebelen (2008) was also in line with the findings of this study. However, while a moderate level of academic resilience may help students cope with certain academic challenges, it is important also for students to demonstrate a high level of academic resilience. This would enable them not only to cope efficiently with any challenges but also to overcome academic impediments, stress and study pressure related with the school as demonstrated by internal and external protective factors and positively support their likelihoods of achieving anticipated and efficacious academic goal (Gonzalez & Padilla 1997).

Also, there are certain factors which play dynamic roles in students' level of academic resilience. Some of these factors include students' self-efficacy which is students' belief in self to realising academic success, their opinion of their competences. Research hypothesis one was raised to address this and the result showed that self-efficacy had a significant influence on students' academic resilience. This may be because self-efficacy has been considered to be the foundation of human agency and a significant protective factor regulating students' functioning and emotional wellbeing through cognitive, motivational, affective, and selective processes (Cassidy, 2015). This finding is in line with the findings of Martin and Marsh (2006) who reported that self-efficacy among other factors such as planning, persistence, anxiety, is a strong predictor of academic resilience. Using class participation (behavioural) and enjoyment at school (cognitive-affective) as educational outcome constructs, Martin and Marsh

hypothesized that the outcome constructs were consequential to students' self-efficacy-perceived capacity to effectively deal with challenge, adversity and setbacks experienced in a school setting.

As hypothesized, academic resilience was the strongest - relative to the other motivational and engagement factors—predictor of each of the outcome measures. Analysis to determine students' profiles according to academic resilience revealed that resilient students were high in self-efficacy, persistence and planning and low in anxiety and uncertain control. Hamill (2003) also reported self-efficacy as an important characteristic that distinguished resilient and non-resilient students. This can be further explained by the postulations of Cassidy (2015) that in educational studies, individual differences in perceived self-efficacy have often been shown to be better predictors of performance (Cassidy 2015). As believed by Bandura (1993), students' beliefs in their efficacy to regulate their learning and master academic activities determine their aspirations, level of motivation and ultimately their academic accomplishments. Hamill (2003) authenticated his research findings by saying that except people believe they can produce anticipated objectives through the actions they will have very little motivation to persist in the face of problems. Then, self-efficacy would be an essential attribute in the expansion of capability for students facing difficulty in their academics. Perceived self-efficacy likely affects students' ability to adjust and deal flexibly with demanding academic circumstances, and also affects their ambitions, analytical thinking, and determination in the face of disappointment which could lead to academic attainment and accomplishment.

Conclusion

Postgraduate studies involve the rigours of academic processes such as independent study, comprehensive research, publication procedures and so on. It is obvious from this study that academically resilient students are more effective in school and are more likely to succeed academically. Also, efforts to encourage academic resilience should therefore be included by educators because evolving more resilience in students has many encouraging significances.

This study also establishes that self-efficacy being an internal belief of one's ability to achieve is also a significant associative factor of academic resilience that determines success at postgraduate level. Besides, due to the multifaceted nature of the theory of academic resilience, qualitative research should be involved to discover what other elements influences student academic resilience, beyond the confines of the questionnaire.

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