



SOCIO-DEMOGRAPHIC VARIABLES AS PREDICTORS OF ACADEMIC RESILIENCE AMONG IN-SCHOOL ADOLESCENTS IN IMO STATE

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Abstract

This study examined socio-demographic variables as predictors of academic resilience among in-school adolescents in Imo State. Three research questions and three hypotheses guided the study. The correlation survey research design was adopted for this study. The population for this study comprises of 22, 159 SS 2 in-school adolescents in government owned secondary schools in Imo State. The sample for this study comprised 387 SS 2 in-school adolescents drawn from the six education zones in Imo state. This sample size was estimated using the Taro Yamane formula. The instruments for data collection are the student's socio-demographic information and the academic resilience questionnaire which contains 12 items. The instruments were subjected to face and content validity by experts. The instruments for data collection were subjected to reliability test. Kuder-Richardson formula was used to establish reliability for the student's socio-demographic information and yielded a coefficient of 0.73. The academic resilience questionnaire yielded a reliability index of 0.89. The administration of the instrument for data collection was done through direct delivery approach. Data relating to research questions 1-2 were analyzed using simple regression analysis, while research question 3 was analyzed using multiple regression analysis. Similarly, simple and multiple regression analysis were used also to test null hypotheses 1-3. The findings of this study revealed that in-school adolescents' age is a significant predictor of their academic resilience in Imo state. Parent's educational level is a significant predictor of academic resilience of in-school adolescents in Imo state. Socio-demographic variables (in-school adolescents' age, parent's educational level) significantly predict academic resilience of in-school adolescents in Imo State. Conclusions were drawn and it was recommended among others that conferences and seminars should be organized for teachers to enlighten them on the different traits possessed by in-school adolescence. The conference will also throw light on the teaching strategies and management techniques for different skills.

Keywords: Age, educational qualification, academic resilience and in-school adolescence

Introduction

The adolescence level of one's development is the period where individuals exhibit certain characteristics and behaviours, this behaviour exhibited could be informed by some factors such as their resilience as well as their self-efficacy. In view of the current occurrences among adolescent's world over, the period is perceived as a critical stage of development where responses to transitions characterize the individual's capacity to thrive and overcome challenges. This is because the critical period of development that occurs during the adolescent years is one of the most challenging to understand and support (Erford, 2017). According to Unachukwu, Ebenebe and Nwosu (2021), adolescence is a stage of life in the development of an individual which is between childhood and adulthood occasioned by physical changes called puberty. Adolescence is the span of years between childhood and adulthood.

According to the 1999 constitution of Nigeria, anybody from childhood who is below the age of 18 years is still considered a child. So, a Nigerian adolescent could be described as one within the age bracket of 11 and 18. Nonetheless, in the context of this study, adolescents are described as students in secondary schools within the age bracket of 11 and 18. It is a stage of life characterized by changes in preferences, experiences, desires, behaviour and sexuality which greatly determines anticipation for other life experience. In recent years, educational psychologist opined that, factors other than intellectual ability plays important roles in the academic success of adolescents. Such factors include but not limited to academic resilience.

Resilience is the process of overcoming the negative effects of risk exposure, coping successfully with traumatic experiences and avoiding the negative trajectories associated with risks (Anakwe & Dikko, 2017). Academic resilience is also defined as the ability of students to deal with intellectual decline, stress, and pressure on the learning process effectively. Stating further, Nirwana, et al. (2021) opined that academic resilience is one of the components needed by students in the learning process. This is because academic resilience provides resilience and capacity in individuals to rise from various difficulties and obstacles in the learning process. In addition, academic resilience is an essential factor for in-school adolescents to undergo certain academic programmes. Buttressing this, Kumalasari and Akmal (2021) reported that academic resilience can make students have better online learning readiness and increase satisfaction in the online learning process. The study of Roellyana and Listiyandini (2016) revealed that students with high resilience

would feel optimistic and believe that everything they face will get better. In the context of this study, academic resilience is the capacity to withstand, cope and overcome hard time and difficulty. The inability of students to have academic resilience could affect their daily academic pursuit.

Several studies have been conducted within and outside Nigeria, relating to the variables of interest in this present study. Among which include a study by Khalaf (2014) among university students in Egypt, academic resilience and academic performance are found to be significantly related. Studies carried out in Kenya have found a positive correlation between teachers' qualification, experience, students' attitudes, type of school, gender, motivation, poor self-concepts and inadequate staff and mathematics achievement (Njoki, 2018). This situation could portend serious problems for the school, and perhaps could be the reason researchers such as Wentzel cited in Anyamene, Ejichukwu and Azuji (2019), have researched unendingly to ascertain important factors that promote positive adjustment of individuals in school, especially at the secondary school level. Some important factors as noted by Wentzel include such elements as socio-demographic variables, participation in school events. However, some psychological constructs including socio-demographic variables could influence the academic resilience of in school adolescents.

Generally, socio-demographic factors include marital status, educational status, religious status, socio-economic status, family status, age among others. Specifically, Okhakhume, Aroniyaso and Olu (2018) reported that some studies conducted by Western and Asian researchers has relate depression with some socio-demographic variables like gender, marital status, household composition, living arrangements, ethnicity, education and occupational class to examine whether there is significant relationship or not. Thus, academic resilience of in school adolescents can be attributed to socio demographic variables. Unegbu, Amaechi, Njoku and Opara (2015) enumerated socio-demographic variables to include, age, gender and academic rank. However, the present study will be limited to two socio-demographic variables namely adolescents' age, and educational level.

Adolescents' age influences the academic resilience of adolescents. This could be a case where most students within a particular age bracket tend to have high academic resilience than others. Age is the chronological number of adolescents which could predict in-school adolescent's academic resilience towards academic pursuit. Indrahadi and Wardana, (2020) pointed that, other

studies had also measured the factors that affect academic achievement, they include student factors including demographic information such as gender and age of race, ethnicity, socioeconomic status.

Another socio-demographic variable to be examined in this study is educational level. In this study, educational level is categorized as primary, secondary, diploma, tertiary, post-graduate diploma, masters and PhD education. It is possible that parents who are more educated would have more level of exposure and could influence the degree of students' academic resilience. A study by Owan and Asuquo (2021) indicated that education level determines their satisfaction with academic activities. The kind of academic programmes students engage in is influenced by their academic resilience, therefore, education programmes in school portray various levels of education in the school (El-Hilali, Al-Jaber and Hussein in Owan & Asuquo, 2021). Despite the available paucity of literature on socio demographic variables. Much is needed to reveal the links between education level as a socio-demographic variable and in-school adolescents' academic resilience, and this is what the present study intends to investigate.

In Pakistan, the result of a study as reported by Soharwardi, Fatima, Nazir, and Firdous (2020), showed that both parental income and their educational level positively impacts the performance of students. Lower academic achievement of students was attributed to socioeconomic backgrounds, while their counterparts from higher socioeconomic background had corresponding higher academic achievement. Although students from the low-income background were able to discover their passion for academics, notwithstanding their parental low income, they were able to succeed academically in school and were also satisfied with their academic achievement (Dias, 2017). Despite reports from studies carried out in different countries of the world, there still lies a lacuna in the body of research regarding the empirical establishment of factors predicting academic resilience of in-school adolescents here in Nigeria and particularly in Imo State.

It is evident that in-school adolescents in secondary schools in Imo state seem to be drifting away from activities that should improve their academic resilience and this in turn seems to influence their overall wellbeing in the society. The academic resilience of adolescence seems to be affected. However, despite the importance of these trait (academic resilience), adolescents in secondary schools in Imo state still function and carry out academic activities below expectations.

Nonetheless, this worrisome state informs the present study to examine socio-demographic variables as predictors of academic resilience among in-school adolescents in Imo State.

Research questions

The following research questions guided the study:

1. What is the prediction value of in-school adolescents' age on their academic resilience in Imo state?
2. What is the prediction value of parent's educational level on academic resilience of in-school adolescents in Imo state?
3. What is the prediction value of socio-demographic variables (in-school adolescents' age, parent's educational level) on academic resilience of in-school adolescents in Imo State?

Null Hypotheses

The following null hypotheses were tested at 0.05 alpha level:

1. In-school adolescents' age is not a significant predictor of their academic resilience in Imo state.
2. Parent's educational level is not a significant predictor of academic resilience of in-school adolescents in Imo state.
3. Socio-demographic variables (in-school adolescents' age, parent's educational level) do not significantly predict academic resilience of in-school adolescents in Imo State.

Methods

The correlation survey research design was adopted for this study. According to Nworgu (2015), a correlational design is a research design that seeks to establish relationship between two or more variables as well as indicates the direction and magnitude of the relationship between the variables. The population for this study comprises of 22, 159 SS 2 in-school adolescents in government owned secondary schools in Imo State. The sample for this study comprised 387 SS 2 in-school adolescents drawn from the six education zones in Imo state. This sample size was estimated using the Taro Yamane formula. To arrive at this sample size, the multi-stage sampling procedure was used. The instruments for data collection are the student's socio-demographic information and the academic resilience questionnaire which contains 12 items. The questionnaire

adapted for the study was structured on 4-point Likert scale of Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD).

The instruments were subjected to face and content validity. In doing this, experts from the Department of Psychology, Measurement and Evaluation were given copies of the instrument alongside the title of the study, purpose of the study, research questions and hypotheses. They were expected to scrutinize the instrument and make contributions for corrections where necessary, before the final copy of the instruments were produced for data collection. The instruments for data collection were subjected to reliability test. A total of 40 in-school adolescents in secondary schools in Owerri education zone 1 were used to establish the reliability for this study. The Kuder-Richardson formula was used to establish reliability for the student's socio-demographic information. The academic resilience questionnaire yielded a reliability index of 0.89.

The administration of the instrument was done through direct delivery approach. By this method, copies of the questionnaire were distributed personally to the respondents (in-school adolescents in SS II in Imo state) by the researcher with the help of regular teachers from each school who served as research assistants. Data relating to research questions 1-2 were analyzed using simple regression analysis, while research question 3 was analyzed using multiple regression analysis. Similarly, simple and multiple regression analysis were used also to test null hypotheses

The decision rule on the predictive value was guided by Muiji's guideline (2004). This was based on squared regression coefficient (R^2) and Beta weights (β) as shown below:

For R^2 :

0.00 – 0.1 weak fit

0.1 – 0.3 modest fit

0.3 – 0.5 moderate fit

> 0.5 strong fit

Using the beta weighting (β) the decision rule is as follows:

0.00 – 0.1 weak effect

0.1 – 0.3 modest effect

0.3 – 0.5 moderate effect

> 0.5 strong effect

For the hypothesis, where the obtained p-value is equal or less than 0.05, the null hypothesis will be rejected, but where the obtained p-value is greater than 0.05, the null hypothesis will not be rejected. SPSS version .25 will be used for the data analysis.

Result

Research Question 1: What is the prediction value of in-school adolescents' age on their academic resilience in Imo state?

Table 1

Simple Regression Analysis with Age as Predictor of Academic Resilience Among In-school Adolescents in Imo State (n =387)

Predictor	Dependent Variable	B	SE	B	Remark
Constant	Academic Resilience	32.68	1.46		
Age		0.19	0.09	0.11	Weak predictive value
R = 0.11					
R ² =0.01					
Adj.=0.01					

Summary of simple regression result displayed in Table 1 shows that, using age to predict academic resilience of in-school adolescents in Imo state, yield a beta coefficient (β) = 0.11, R = 0.11 and R² = 0.01. This indicates that age explains only 1% of the variance in academic resilience of in-school adolescents. Both the β and R and suggest that it was a weak predictive value.

Research Question 2: What is the prediction value of parent's educational level on academic resilience of in-school adolescents in Imo state?

Table 2

Multiple Regression Analysis with Fathers and Mothers' Educational Qualification as Predictors of Academic Resilience Among In-school Adolescents in Imo State (n =387)

Predictor	Dependent Variable	B	SE	B	Remark
Constant	Academic Resilience	33.05	0.81		
Fathers' Edu. Qual.		0.48	0.14	0.18	weak predictive value
Mothers' Edu. Qual.		0.12	0.16	0.04	Weak predictive value

R = 0.20

Weak predictive
value

R²=0.04

Adj.=0.04

Table 2 displays multiple regression with Fathers' and mothers' educational qualification as predictors of academic resilience among in-school adolescents. The result yielded β values of 0.18 and 0.04 respectively. The R value was 0.20 and R² 0.04. This suggests that both variables accounted for 4% of the variance in in-school adolescents' academic resilience. The overall model regression coefficient with parents' educational qualifications as predictor of academic resilience produced a weak predictive value.

Research Question 3: What is the prediction value of socio-demographic variables (in-school adolescents' age, parent's educational level) on academic resilience of in-school adolescents in Imo State?

Table 3

Multiple Regression Analysis with Socio-demographic Variables as Predictor of Academic Resilience Among In-school Adolescents in Imo State (n =387)

Predictor	Dependent Variable	B	SE	B	Remark
Constant		28.85	1.68		
Age	Academic Resilience	0.20	0.09	0.12	Weak predictive value
Fathers' Edu. Qual.		0.30	0.16	0.11	Weak predictive value
Mothers' Edu. Qual.		0.15	0.17	0.05	Weak predictive value
R = 0.27					Weak Predictive value
R ² =0.07					
Adj.=0.06					

Table 3 displays summary of multiple regression analysis with demographic variables as predictors of academic resilience among in-school adolescents in Imo state. The multiple regression coefficient (R) of 0.27 shows that the demographic variables jointly have weak predictive value for academic resilience among the sample. Furthermore, the squared R (R²) of 0.07 indicates these demographics jointly explained 7% of the variance in in-school adolescents in Imo state.

Hypotheses Testing

Hypothesis 1: In-school adolescents' age is not a significant predictor of their academic resilience in Imo state.

Table 4

Test of Significance of Simple Regression Analysis with Age as Predictor of Academic Resilience Among In-school Adolescents in Imo State (n =387)

Predictor	Dependent Variable	B	SE	B	t	p	Remark
Constant		32.68	1.46		22.32	0.000	Significant
Age	Academic Resilience	0.19	0.09	0.11	2.14	0.033	Significant
R = 0.11							
R ² =0.01							
Adj.=0.01							

As shown in Table 4, in-school adolescents' age was a significant predictor of their academic resilience, $\beta = 0.11$, $t = 2.14$, $p = 0.033$. Since the p-value was less than 0.05 level of significance, the null hypothesis was rejected.

Hypothesis 2: Parent's educational level is not a significant predictor of academic resilience of in-school adolescents in Imo state.

Table 5

Test of Significance of Multiple Regression Analysis with Fathers and Mothers' Educational Qualification as Predictors of Academic Resilience Among In-school Adolescents in Imo State (n =387)

Predictor	Dependent Variable	B	SE	β	t	p	Remark
Constant		33.05	0.81		40.73	0.000	Significant
Fathers' Edu. Qual.	Academic Resilience	0.48	0.14	0.18	3.34	0.001	Significant
Mothers' Edu. Qual.		0.12	0.16	0.04	0.72	0.475	Not Significant
*R = 0.20						0.000	*Significant
R ² =0.04							
Adj.=0.04							

*F(2,384) = 8.27, p = 0.000.

The multiple regression analysis presented in Table 5 shows that in-school adolescents' parents' educational qualification was a significant predictor of their academic resilience, $R = 0.20$, $F(2,384) = 8.27$, $p = 0.000$. Since the p-value was less than 0.05 level of significance, the null hypothesis was rejected.

Hypothesis 3: Socio-demographic variables (in-school adolescents age, parent's educational level) do not significantly predict academic resilience of in-school adolescents in Imo State.

Table 6

Test of Significance of Multiple Regression Analysis with Socio-demographic Variables as Predictor of Academic Resilience Among In-school Adolescents in Imo State (n =387)

Predictor	Dependent Variable	B	SE	β	T	p	Remark
Constant	Academic Resilience	28.85	1.68		17.15	0.000	Significant
Age		0.20	0.09	0.12	2.30	0.022	Significant
Fathers' Edu. Qual.		0.30	0.16	0.11	1.88	0.061	Not Significant
Mothers' Edu. Qual.		0.15	0.17	0.05	0.90	0.371	Not Significant
*R = 0.27 R ² =0.07 Adj.=0.06							
							*Significant

*F(5,381) = 5.83, p=0.000

As shown in Table 6, socio-demographic variable was jointly a significant predictor of academic resilience among in-school adolescents in Imo state, $F(5,381) = 5.83$, $p=0.000$. Since the p-value was less than 0.05 level of significance, the null hypothesis was rejected. However, only two of the demographic variables made significant individual contribution to the model.

Discussion of Findings

The findings of this study reveal that age explains only 1% of the variance in academic resilience of in-school adolescents. This suggests a weak predictive value. In the same vein, in-school adolescents' age is a significant predictor of their academic resilience in Imo state based on the hypothesis. This conforms to the findings of Massar, Patil and Pujar (2020) who reported that age, gender, parents' education and occupation, socio-economic status was positively correlated

with adolescents' sense of mastery and relatedness except with sense of emotional reactivity. Hierarchical regression analyses revealed that predictive factors accounted for significant variance (R^2) and the variance was found significantly higher for rural adolescents' resiliency outcomes compared to urban adolescents' resiliency outcomes.

The study found that fathers' educational qualification and mothers' educational qualification accounted for 4% of the variance in in-school adolescents' academic resilience. The overall model regression coefficient with parents' educational qualifications as predictor of academic resilience produced a weak predictive value. The demographic variables jointly have weak predictive value for academic resilience among the sample. The demographic variables jointly explained 7% of the variance in in-school adolescents in Imo state. The hypothesis revealed that parent's educational level is a significant predictor of academic resilience of in-school adolescents in Imo state. This aligns with the findings of Oluwakemi (2015) who found that psycho-social variables had a significant joint prediction on academic resilience of under-achieving students and they jointly accounted for 23.7% to the observed variance in academic resilience. The finding of the present study also agrees with Mwangi, Ireri and Mwaniki (2017), who found a significant strong positive relationship between the external and internal protective factors. In addition, internal protective factors had a higher positive and significant predictive value on academic resilience than external protective factors. The results indicated that internal and external protective factors jointly explained a significant amount of variance in students' academic resilience.

Conclusion

Based on the findings of this study, it was concluded that, socio-demographic variables (in-school adolescents' age, parent's educational level) significantly predict academic resilience. However, age was a weak but significant predictor of academic resilience among in-school adolescents in Imo state.

Recommendations

The following recommendations were made based on the findings of the study:

1. Academic resilience related programme should be included in the school curriculum so as to enhance in-school adolescence intentions. This will help them discern on time their desired course of study for future academic endeavours.

2. Conferences and seminars should be organized for teachers to enlighten them on different traits possessed by in-school adolescence. The conference will also throw light on the teaching strategies and management techniques for different skills.

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