



Psychological factors of academic motivation among secondary school students in Etche local government area of rivers state, Nigeria

*Dr. Ernest Ehibudu Ijeoma Regina, Onyeche Christian Ejike

Department of Educational Psychology, Guidance and Counselling, Faculty of Education, University of Port Harcourt, Rivers State, Nigeria

Abstract

The study investigated psychological factors of academic motivation among secondary school students in Etche Local Government Area of Rivers State. Ex-post facto research design was used in this study. A sample size of 600 students was selected from SS1 and SS2 using stratified random sampling in 10 public secondary schools in Etche Local Government Area of Rivers State. Three research questions were answered and three hypotheses were tested in the study at 0.05 level of significance. The instrument used for the study is titled: Psychological Factors as Correlates of Academic Motivation Questionnaire (PSFCAMQ) developed by the researchers. The PSFCAMQ had four sections of 12 items each related to the factors under review. The reliability of the instrument was established using Cronbach alpha as follows; Academic motivation 0.76, attribution 0.86, self-concept 0.81 and interest 0.84. The research questions were answered using mean and standard deviation while the hypotheses were tested with t-test of independence at 0.05 Alpha levels. It was found out that students' internal and external attribution, positive and negative self-concept, high and low interest has significant influence on their academic motivation. It was recommended that counsellors and teachers should help students to think about or perceive themselves positively. Again, teachers should trigger high interest in students to increase academic motivation in them as they continue to reinforce students verbally.

Keywords: attribution, self-concept, interest, academic motivation

Introduction

Education in Nigeria is a vital instrument to bring change into the life and pattern of an individual and the society at large. It is obvious that students who are not motivated to succeed will not work hard and the result will be failure and poor academic performance. It will in turn affect the growth and development of the nation. Students who lack academic motivation do not strive to study and lack the self-determination to prepare and pass examinations. As a result, of their inadequate preparation for exams, they seek for alternative means to pass their examinations. They see examination malpractice as their last resort to academic success at the expense of our educational growth.

The various behavioural differences among secondary school students in their academic work have disturbed teachers and psychologists in recent times. As a result, studies on academic motivation is now of great interest to teachers, counsellors, educationists, researchers and the general public. Also, academic achievement of students in recent years at various levels including secondary school level has generated a lot of concern to many interested individuals and government. There is a great need to investigate to know where the source of this malady could stem from.

“Motivation is a set of one or more conditions which activate, turn-on behavior, direct the behaviour towards some goals, and maintains behavior until the goal is reached” (Witting and Williams in Nwankwo, 2007, p.233) [11]. In other words, motivation can be described as behaviours that illustrate interest, enthusiasm, appreciation, or dedication. This means

that motivation plays a major role in an individual's choice of and continued engagement in particular activities. Woolfolk (2001) [18] described motivation as an internal state that arouses, directs and maintains behaviour. This implies that motivation is the internal or external attribute that moves one to do or not to do something.

According to Gesinde (2000) [6], academic motivation could be seen as self-determination to succeed in academic work. He posits that the urge to achieve varies from one individual to the other, while for some individuals, the need for achievement is very high and for others it may be very low. What could be responsible for the variation could be the fact that academic motivation is believed to be developed during socialization processes and learning experiences. Academic motivation in a student in classroom is determined by internal interests such as mastery, curiosity and determination to learn; while the external is determined by external interest such as teacher's approval and grades. Teachers describe students who simply lack motivation as deficient of enthusiasm, desire, interest and driving force and often attribute these motivational deficiencies to causes that are beyond their control such as poor parenting or weak personality characteristics. Also, teachers often see individuals as semi-autonomous beings with stable personalities that are resistant to environmental influences (Urdu and Schoenfelder, 2006) [15]. Academic motivation is vital to the future of society to enhance the learning and academic achievement of students, especially those in higher education. Given that motivation likely plays a key role in learning and academic performance,

it is crucial to develop a better understanding of the determinants and facets of academic motivations.

Intelligence may not be the only determinant of academic motivation and academic achievement. Development of academic motivation in young children is an important goal for educators because of its inherent importance for future motivation, as well as for children's effective school functioning (Gottfried, 1990) [7]. This study investigated the influence of attribution, self-concept and interest on students' academic motivation.

Attribution is a concept in social psychology addressing the processes by which individuals explain the causes of behaviour and events. Attribution theory attempts to systematically describe learners' belief about the causes of their success and failure and shows how these beliefs influence motivation to learn. Weiner (2001) [16] states that motivation tends to increase when students attribute failure to lack of effort. It tends to decrease when students attribute failure to controllable causes like luck. Attribution deals with how the social perceiver uses information to arrive at causal explanations for events. It examines what information is gathered and how it is combined to form a causal judgment. Attribution theory according to Weiner, (2005) [17] is the explanations that people tend to make to explain success or failure. It is probably the most influential contemporary theory with implications for academic motivation. It incorporates behaviour modification in the sense that it emphasizes the idea that learners are strongly motivated by the pleasant outcome of being able to feel good about themselves. Attribution (locus of control) "is the assignment of causes to behaviour or perception or inference of the causes of behaviour, such causes including personal dispositional factors and external situational factors" (Colman 2003, pg: 63) [3]. Attribution that students make about their academic failure and success has been linked to motivation. Ukomadu (2007) [14] discovered that students' performance and academic achievement is influenced by their locus of control especially their internal locus of control.

Self-concept is defined as "Individuals' belief about themselves in terms of their academic, social, athletic, and personal capabilities and characteristics" (Schunk, Pintrich and Meece, 2008) [13]. Woolfolk, (2001) [18] described self-concept as the value that an individual places on his or her own characteristics, qualities, abilities, and actions. Schunk *et al.* (2008) [13], posit that positive self-concept lead students to set challenging yet attainable academic goals for themselves, feel less anxious in achieving the set goals. Academic self-concept is defined as the student's perception of competencies at school. Academic self-concept refers to individuals' knowledge and perceptions about themselves in academic achievement situations. This perception can be seen as a cognitive evaluation of the abilities to accomplish certain tasks. The academic self-concept is significantly related to academic achievement, but is far from being a perfect predictor of school success (Hattie, 1992) [8].

Academic self-concept is a non-cognitive aspect of self that refers to a domain of general self-concept. More specifically, it is the attitude, feelings and perceptions individuals have towards their intellectual or academic skills (Lent, Brown and Gore, 1997) [10]. Student's academic self-concept relates to

negative and positive reinforcement of internal standards determined and measured by the student. The importance of self-concept within educational settings has been discussed by several scholars and has led to the performance of studies examining the role of self-concept in motivation school performance (Al-Zyoudi, 2007) [1]. Self concept has been the focus of countless research studies and it is one of the most enduring constructs in psychology and education. Fortier, Vallerand and Guay (1995) [5] in their investigation they found that perceived academic competence and perceived academic self-determination positively influenced autonomous academic motivation, which in turn had a positive impact on school performance. Dekreffline (2003) [4] in a study discovered that individual learners who have higher self concept aim more at success in academics than those with low self concept.

Interest is one of the most important motivational factors which results in a deeper long-lasting learning experience. Individual interest has been described as a relatively enduring predisposition to attend to certain objects and events and to engage in certain activities (Renninger, 2000) [12]. This behaviour is associated with a psychological state of positive effect and persistence (Hidi and Renninger, 2006) [9]. Studies on academic motivation revealed a positive relationship between academic motivation and interest. A study conducted by Ainley, Hidi and Berdorff (2002) [2] revealed that students' interest influence their motivation to learn. It is not yet ascertained however if attribution, self concept, interest influence academic motivation of students in the area of study. Hence, the researchers set out to investigate the psychological factors that influence academic motivation of secondary school students in Etche Local Government Area of Rivers State, Nigeria.

Research Questions

The following research questions guided the study.

1. To what extent does internal and external attribution influence the academic motivation of students?
2. To what extent does positive and negative self-concept influence the academic motivation of students?
3. To what extent does high and low interest influence the academic motivation of students?

Hypotheses

The following null hypotheses tested at 0.05 levels of significance were formulated to guide the study.

1. There is no significant influence of students' internal and external attribution on their academic motivation.
2. There is no significant influence of students' positive and negative self-concept on their academic motivation.
3. There is no significant influence of students' high and low interest on their academic motivation.

Materials and Method

Ex-post facto research design was used in this study and the study was conducted in Etche Local Government Area of Rivers State, Nigeria. The population for the study comprised of all the public secondary schools in Etche Local Government Area of Rivers State, Nigeria. The area is made up of 17 secondary schools. The population of SS1 and SS2

students was 3,020 as at the time of the research. A sample size of 600 students was used for the study. This was drawn from 10 schools out of 17 public secondary schools in Etche. The 600 students were drawn from 10 selected public schools using stratified proportional random sampling. A total number of 251 male and 349 female students were drawn from the schools. The instrument used for the study was Psychological Factors as Correlates of Academic Motivation Questionnaire (PSFCAMQ) developed by the researchers based on the researchers' experience and literature. It contains 12 items each dedicated to the factors under investigation. The items

were structured in a modified four-point Likert scale. To ensure validity of the instruments, the initial drafts of the instruments were scrutinized by three experts in Educational Psychology and Measurement/Evaluation. Using Cronbach alpha, the reliability of the instrument was established as follows; Academic motivation 0.76, attribution 0.86, self-concept 0.81 and interest 0.84. Copies of the instrument were administered to the respondents by the researchers personally. The mean and standard deviation were used to analyze the research questions while the hypotheses were tested using t-test at 0.05 levels of significance.

Results

Table 1: T-test analysis of the influence of internal and external attribution on academic motivation of students

Attribution	N	\bar{X}	SD	df	Tcal	Tcrit	Alpha level	Result
Internal	302	39.38	4.658	598	13.759	1.960	0.05	Significant
External	298	32.86	6.777					

Table 1 shows the mean and standard deviation for the influence of internal and external attribution on academic motivation of students. Students that had internal attribution have better academic motivation than those who have external attribution. Their mean scores and standard deviation were ($\bar{X} = 39.38$, $SD = 4.66$), while for those whose attribution was external, it was ($\bar{X} = 32.86$, $SD = 6.78$). The table likewise shows the hypothesis testing of the students' mean scores that

the calculated t value was 13.76, this is more than the critical t of 1.96 at 598 degree of freedom. The decision is to reject the null hypothesis, which states that there is no significant influence of students' internal and external attribution on their academic motivation and accept the alternate hypothesis that states that there is a significant influence of students' internal and external attribution on their academic motivation.

Table 2: T-test analysis of the influence of positive and negative self-concept on academic motivation of students

Self-concept	N	\bar{X}	SD	df	Tcal	Tcrit	Alpha level	Result
Positive	422	38.42	5.078	598	15.133	1.960	0.05	Significant
Negative	178	30.75	6.868					

Table 2 shows the mean and standard deviation for the influence of positive and negative self-concept on academic motivation of students. Students that had positive self concept have better academic motivation than those who have negative self concept. Their mean scores and standard deviation were ($\bar{X} = 38.42$, $SD = 5.08$), while for those whose self concept was negative, it was ($\bar{X} = 30.75$, $SD = 6.87$). The table

likewise shows the hypothesis testing of the students' mean scores that the calculated t value was 15.13, this is more than the critical t of 1.96 at 598 degree of freedom. The decision is to reject the null hypothesis and accept the alternate hypothesis, which states that there is a significant influence of students' positive and negative self-concept on their academic motivation.

Table 3: T-test analysis of the influence of students' high and low interest on their academic motivation.

Interest	N	\bar{X}	SD	df	tcal	tcrit	Alpha level	Result
High	425	38.21	5.474	598	13.504	1.960	0.05	Significant
Low	175	31.13	6.629					

Table 3 shows the mean and standard deviation for the influence of students' high and low interest on their academic motivation. Students that had high interest have better academic motivation than those who have low interest. Their mean scores and standard deviation were ($\bar{X} = 38.21$, $SD = 5.47$), while for those whose interest was low, it was ($\bar{X} = 31.13$, $SD = 6.63$). The table likewise shows the hypothesis testing of the students' mean scores that the calculated t value was 13.50, this is more than the critical t of 1.96 at 598 degree of freedom. The decision is to reject the null hypothesis and accept the alternate hypothesis that states that, there is a

significant influence of students' high and low interest on their academic motivation.

Discussion

Table 1 indicates that there is a significant influence of students' internal and external attribution on their academic motivation among secondary school students. Students that had internal attribution have better academic motivation than those who have external attribution. Their mean scores and standard deviation were ($\bar{X} = 39.38$, $SD = 4.66$), while for those whose attribution was external, it was ($\bar{X} = 32.86$, $SD =$

6.78). Hypothesis testing of the students' mean scores indicate that the calculated t value was 13.76, this is more than the critical t of 1.96 at 598 degree of freedom and 0.05 alpha level found to be statistically significant. The result is in agreement with Ukomadu (2007) [14] who discovered that students' performance and academic achievement is influenced by their locus of control especially their internal locus of control.

Table 2 indicates that mean and standard deviation of students with positive self-concept were (\bar{X} = 38.42, SD = 5.08), while those whose self-concept was negative is (\bar{X} = 30.75, SD = 6.87). The hypothesis testing indicates that the calculated t value was 15.13; this is more than the critical t of 1.96 at 598 degree of freedom at 0.05 alpha level which is statistically significant. The findings of this study concurs with Dekreffline (2003) [4]. He also found that students with low self concept maintain low level of confidence, negative self perception and low level of performance.

The result in table 3 indicates that there is a significant influence of students' high and low interest on their academic motivation. Students with high interest have better academic motivation than those who have low interest. Mean scores and standard deviation of students with high interest were (\bar{X} = 38.21, SD = 5.47), while those with low interest was (\bar{X} = 31.13, SD = 6.63). When t test was applied, t value was 13.50, while the critical t was 1.96 at 598 degree of freedom and was found to be statistically significant at 0.05 alpha level. This study agrees with the investigation conducted by Ainley, Hidi and Berdorff (2002) [2] which revealed a positive relationship between interest and motivation to learn. The study revealed that students' interest influenced their motivation to learn.

Implication of the findings

There is the implication that students with internal attribution understand that they are the architect of their future. Thus, they are more motivated to study hard to do well in school than the students with external attribution who have reasons to give when they do not do well in their academic work. This implies that the attribution students make influence the level of their academic motivation. The second result of the study indicates that individual learners who have positive self concept are highly motivated and aim more at success in academics than those with negative self concept. Positive self concept leads students to set challenging yet attainable academic goals for themselves, feel less anxious in achieving the set goals. The students with negative self concept maintain low level of confidence, negative self perception and are less motivated in their academic work. Finally, there is need for the teachers to arouse the interest of the learners in order to develop positive interest. External support is especially critical in the early phases of interest and internal support can evolve as interest continues to develop. Students often need teachers' and support of others to continue to develop and sustain their interests.

Recommendations

Based on the findings of this study the following recommendations are made;

1. Students should be made to understand that hard work leads to success and vice versa. This can be achieved

through counselling.

2. It is important that the counsellors and teachers help the students to think about or perceive themselves positively.
3. Teachers should continue to support students verbally, organize the way problems are presented (e.g., involving students' individual interests) and arrange group work that allows students to work with peers.

Conclusion

On the basis of the findings of this research, it was concluded that attribution influenced academic motivation of secondary school students. Students that had internal attribution have better academic motivation than those who have external attribution. The second result of the study indicates that individual learners who have positive self concept are highly motivated and aim more at success in academics than those with negative self concept. Finally, there is a significant influence of students' high and low interest on their academic motivation. Students with high interest have better academic motivation than those who have low interest.

References

1. Al-Zyoudi M. Gender differences in self-concept among adolescents with low vision. *Journal of Special Education*. 2007; 22(1):132-136.
2. Ainley M, Hidi S, Berndorff D. Interest and the psychological processes that mediate their relationship. *Journal of Educational Psychology*. 2002; 94(3):545-561.
3. Colman AM. *Oxford dictionary of psychology*. New York: Oxford University Press, 2003.
4. Dekrefflin R. Self-concept and perception of school atmosphere among senior high school students. *Canadian Journal of Education*. 2003; 18:234-241.
5. Fortier MS, Vallerand RJ, Guay F. Academic motivation and school performance: Toward a structural model. *Contemporary Educational Psychology*. 1995; 20:257-274.
6. Gesinde AM. *Motivation: Fundamental of Guidance and Counselling*. Ibadan: Kanead Publishers, 2000.
7. Gottfried AE. Academic intrinsic motivation in young elementary school children. *Journal of Educational Psychology*. 1990; 82(3):525-538.
8. Hattie J. *Self concept*. Hillsdale, NJ: Erlbaum, 1992.
9. Hidi S, Renninger KA. The four-phase model of interest development. *Educational Psychologist*. 2006; 41(2):111-127.
10. Lent RW, Brown SD, Gore PA. Discriminant and predictive validity of academic self concept, academic self-efficacy, and mathematics-specific self-efficacy. *Journal of Counseling Psychology*. 1997; 44(3):307-315.
11. Nwankwo OC. *Psychology of learning: The human perspective*. Port Harcourt: Pan Unique Publishers, 2007.
12. Renninger KA. *Individual interest and its implications for understanding intrinsic motivation*. New York: Academic Press, 2000.
13. Schunk DH, Pintrich PR, Meece JL. *Motivation in education: Theory, research, and applications*. Upper Saddle River, NJ: Pearson, 2008.
14. Ukomadu ON. Influence of locus of control of academic achievement of secondary school students in Port

- Harcourt metropolis. Counseling implications. Unpublished master's thesis, University of Port Harcourt, 2007.
15. Urdan T, Schoenfelder E. Classroom effects on student motivation: Goal structures, social relationships, and competence beliefs. *Journal of Educational Psychology*. 2006; 44:331-349.
 16. Weiner B. Intrapersonal and interpersonal theories of motivation from an attribution perspective. New York: Academic/Plenum, 2001.
 17. Weiner B. Motivation from an attributional perspective and the social psychology of perceived competence. In A. J Elliot and C. S. Dweck (Eds.), *Handbook of Competence and Motivation*. New York: Guilford, 2005, 73-84.
 18. Woolfolk A. *Educational Psychology* (8th ed). Needham Heights, MA: Allyn and Bacon, 2001.