

ACADEMIC MOTIVATION AND PERFORMANCE OF JUNIOR HIGH SCHOOL STUDENTS IN GHANA

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ABSTRACT: *The study examined academic motivation and academic performance of Junior High School (JHS) students in Ghana. Differences between the academic motivation of male and female students as well as between students from urban and rural schools were examined. Participants were 756 male and 714 female JHS 2 students randomly selected from 24 Junior High Schools through stratified random sampling using gender and location as criteria for stratification. Two research instruments, the Academic Motivation Scale (AMS) with a Cronbach Alpha Reliability Coefficient of 0.75 and Achievement Tests in Mathematics, English Language, Social Studies and Integrated Science were used to collect data. Pearson Product Moment Correlation Coefficient and t-tests were used in analyzing the data. The results showed a positive relationship between academic motivation and academic performance of JHS students. While the results showed a statistically significant difference between the academic motivation of students in schools in urban and rural areas, there was difference between the academic motivation of male and female students. It was recommended that teachers, parents and all those concerned with the education of children should put in place psychological processes that are intended to boost the ego of students thereby making them have an inner feeling of satisfaction when they accomplish academic tasks.*

KEYWORDS: Academic Motivation, Performance, Junior High School, Students, Ghana

INTRODUCTION

Early motivational theorists in psychology attempted to explain motivation in many different settings and for many kinds of behaviour. As a theoretical construct, motivation is used to explain the initiation, direction, intensity and persistence of behaviour, especially goal-directed behaviour (Maehr & Meyer, 1997). In the classroom context, the concept 'motivation' is used to explain the degree to which students invest attention and effort in various pursuits which may or may not be the ones desired by teachers (Brophy, 2004).

Aggarwal (2008), argued that motivation is the very heart of the learning process. According to him, adequate motivation not only sets in motion the activity which results in learning, but also sustains and directs it. On their part, Ryan and Deci, as cited in Slavin (2009), view motivation as one of the most critical components of learning. They however, conceded that, motivation is a product of many factors. These factors range from the student's personality and abilities to the characteristics of a particular learning task, incentives for learning, setting and teacher behaviour. Pintrich and DeGroot, as cited in Rusillo and Arias (2004), identified three general categories of relevant constructs for motivation in the educational context. These are expectation, value and affective components. The expectation component involves students' belief about their ability to complete a task. The value component includes students' goals and beliefs about a task's importance and their interest in that task. Affective component includes the affective-emotional consequences derived from completing the task as well as the results of success or failure at an academic level.

These beliefs about motivation, according to Deci and Ryan, as cited in Gurland and Glowacky (2011), provide an account of human motivation and self-regulation learning. They distinguished between the doing of an activity and an individual's experience of doing the activity. They argued that people who appear to be equally motivated to engage in an activity can differ in how they experience the performance of that activity. They explained that some individuals may perform an activity with a genuine sense of wanting to do it. These individuals, they posited, may engage in that activity because it is interesting and enjoyable for its own sake. Such individuals, according to Deci and Ryan, see that activity as personally important to them. Other individuals by contrast, may engage in an activity with a sense of externally or internally imposed coercion. These individuals may perform an activity for the sake of rewards, consequences, or other outside contingencies. On this account, motivation is indexed not by whether individuals engage in an activity or not, but rather by how much they experience the activity as interesting, enjoyable or personally valuable versus as pressured or coerced (Gurland & Glowacky, 2011).

Bouffard and Coutoure (2003), citing Bandura's socio-cognitive theory, explain that student motivation is neither an innate concept nor a trait of personality, but rather a construct that is built out of an individual's learning activities and experiences and that vary from one situation or context to another. In line with this idea, the concept "motivation" has been highlighted as a multi dimensional and situation specific construct (Volet, as cited in Bouffard & Coutoure, 2003). According to the contextual perspective, motivation is based on a variety of elements whose relevance and weight vary depending on different dimensions. As such, the efficacy of motivational determinants and achievement of individuals may vary according to their culture, the context in which they are called on to act, and their personal characteristics (Bouffard & Coutoure, 2003).

Researchers have attempted to find reasons why some students, when faced with learning problems, cheerfully roll up their sleeves ready to tackle the problem, while other students throw their hands in despair and defeat. Dweck and Leggett (1988), argue that these two behavioural patterns reflect different underlying achievement goal orientations. The optimistic pattern of

responding, it has been explained, reflects an orientation towards a learning goal. In contrast, the less optimistic pattern of responding reflects an orientation towards performance goal (Eppler & Harju, 1997). These patterns of motivational attitudes and their corresponding behavioural responses reflect beliefs, ability and effort rather than actual difference in intellectual ability (Dweck & Leggett, 1988).

Academic motivation, it has been suggested, is important not only in getting students to engage in academic activities, but also in determining how much students will learn from activities they perform, or from the information to which they are exposed. This suggestion is consistent with the definition that academic motivation is a student's desire, effort and persistence related to achieving academic success (Brouse, Basch, LeBlanc, McKnight & Lei, 2010; Eppler & Harju, 1997; Guiffrida, Lynch, Wall, Abel, 2013; Pascarella, Wolniak, Pierson, & Flowers, 2004; Reynolds & Weigand, 2010). Similarly, academic motivation, according to Pintrich and Zusho, as cited in Ekeh and Njoku (2014), refers to internal processes that instigate and sustain activities aimed at achieving specific academic goals. Ekeh and Njoku (2014), explain that academic motivation in effect is an internal process in an individual that spurs him or her to set an academic goal, plan towards achieving that goal and strives towards the realization of that goal. Thus, students who are academically motivated to learn something use high cognitive processes in learning about it, and absorb and retain more from it (Driscoll, 2005) and are more likely to transfer learning to new situations (Pugh & Bergin, 2006).

Awanbor, as cited in Adepoju (2008), argued that students who lack sufficient level of academic motivation exhibit a weak drive towards the pursuit of academic goals. Such students, Awanbor posited, manifest signs and symptoms of indifference and apathy towards school. Awanbor suggested that a majority of such students, if not all, are often involved in examination malpractices.

Ajayi, Ajayi and Onabanjo (2011), in a study in Ogun State of Nigeria, found that academic motivation had a strong total effect of 0.321 of which 0.270 was the direct effect of the variation on students' attitude towards mathematics. This finding corroborates the findings of Blank, as cited in Muola (2010), that students who are high in academic motivation are more likely to have increased levels of academic achievement, and lower dropout rates. Tella (2007), found that students differed significantly in their academic achievement based on the extent to which they were academically motivated. The results of the study revealed that highly motivated students performed better academically than lowly-motivated students. While this finding of Tella (2007), harmonizes with the findings of Christian, as cited in Adepoju (2008), it contradicts the findings of Niebur, cited in Halawah (2006), that motivation did not have a significant effect on the academic achievement of students.

Niebur's finding is consistent with the findings of Deci, as cited in Vansteenkiste, Lens and Deci (2006). Deci in a study rewarded some participants for engaging in an intrinsically interesting activity. He observed that the rewarded participants enjoyed the activity less and showed less subsequent behavioural persistence than the non-rewarded participants. Deci's finding is

particularly interesting because it is an instance in which people are approaching outcomes they value, but the process of doing so has negative effects on the prototype of their proactive growth-oriented nature. Deci interpreted this undermining of intrinsic motivation as indicating that the participants' behaviour which had initially been intrinsically motivated became controlled by the reward, so their sense of autonomy was undermined (Vansteenkiste, et al; 2006).

Studies have also shown that students with higher academic intrinsic motivation had higher achievement and intellectual performance. In a study, Gottfried, as cited in Halawah (2006), found that early intrinsic motivation correlates with later motivation and achievement, and that later motivation is predictable from early achievement. These findings of Gottfried corroborate the Self-Determination Theory (Deci, Vallerand, Pelletier & Ryan, 1991; Deci & Ryan, 1985). This theory proposes that humans have an innate desire for stimulation and learning from birth, which is either supported or discouraged within their environment (Deci & Ryan, 2000). Deci and Ryan explained that the degree to which this natural drive or intrinsic motivation is realized is contingent on the fulfillment of an individual's psychological needs.

In a study, Tella (2007), revealed that gender differences were significant when the impact of motivation on academic achievement was compared between male and female students ($t = 9.4$, $t_{crit} = 1.96$, $df = 448$, at 0.05 level). The result of the study showed male students were higher in academic motivation than their female counterparts. While the male students had a mean score of 48.3 their female counterparts had a mean score of 33.4. This finding contradicts that of Balarabe and Abdullahi (1996), who found females to be higher in achievement motivation measure of fear of failure than their male counterparts. ($t = -1.98$, $df = 302$, $p = 0.048$). In this study, female students had a mean measure of 16.705, while their male counterparts had a mean measure of 16.042. According to Balarabe and Abdullahi, this result is interesting because it did not only fail to support male supremacy in academic motivation, but also reveals girls to be higher in the achievement motive of the need to avoid failure.

Adepoju (2008), in a study in Oyo State of Nigeria, found a significant difference in the level of motivation of students from urban and rural secondary schools. The finding of the study showed that students from urban schools obtained a mean score of 159.155 while their counterparts from the rural schools had a mean score of 116.761. This shows that students in urban secondary schools were more motivated to learn than their colleagues in rural schools. This finding, however, contradicts the finding of Adedeji and Adepoju as cited in Adepoju (2008). These researchers did not find a statistically significant difference between the level of motivation of students in urban and rural secondary schools.

Evidence from the literature suggests that the question as to whether academic motivation predicts students' academic performance is important to educational psychologists. Interest in this issue has grown among educational researchers and school professionals because academic motivation can change with environmental and interpersonal factors. For instance, parents, teachers and other school professionals can create the conditions for students' academic motivation to flourish (Reeve as cited in Guay, Ratelle, Roy & Litalien, 2010). and have the potential to improve their academic

performance. Studies have found that declines in academic performance after a transition to Middle School was a reliable predictor of lower motivation and confidence in intellectual abilities (Brouse, Basch, LeBlanc, McKnight & Lei, 2010; Eccles, et al, 1993). These researchers proposed that such declines resulted from developmental mismatch between the early adolescents and their classroom environment, resulting in negative motivational outcomes especially from struggling students, (Long, Monoi, Harper, Knoblauch & Murphy, 2007).

While a considerable number of studies have been carried out on this topic in other countries, very little seems to have been done on it by way of research in Ghana, especially at the Junior High School level. This study, therefore is intended to make a contribution towards filling this gap. The study specifically examined:

1. the relationship between academic motivation and academic performance of students in the JHS
2. the difference in the academic motivation of students based on gender and,
3. the difference in academic motivation of students based on location (urban and rural).

Hypotheses

1. Ho: There is no statistically significant relationship between academic motivation and academic performance of students in Ghanaian JHS.
2. Ho: There is no statistically significant difference in academic motivation of Ghanaian JHS students on the basis of gender.
3. Ho: There is no statistically significant difference in academic motivation of Ghanaian JHS students on the basis of location (urban and rural).

METHODOLOGY

Participants

The study was a national survey which involved second year students in Public Junior High Schools in Ghana. In order to make the sample have a national representation, steps were taken through appropriate sampling procedures to ensure that students from different parts of the country were included.

A sample of 1,470 JHS 2 students was selected from 24 Public Junior High Schools through stratified random sampling using gender and location as criteria for stratification. The participants consisted of 756(51.4%) males and 714(48.6%) females. Out of the 1,470 participants, 750 (51%) were from urban schools and 720 (49.0%) were from rural schools. The mean age of the participants was 14 years.

Instruments

The main instruments used to collect data for the study were the Academic Motivation Scale (AMS) and Achievement Tests in Mathematics, English Language, Social Studies and Integrated Science. These subjects were selected because they are the core subjects taught at the Junior High Schools in Ghana. The Achievement test items were constructed by the Centre for Performance

Monitoring and Evaluation, a consultancy centre in Accra and were based on the JHS 2 syllabi. These test items were in multiple-choice item format with four options. With the exception of the mathematics test which consisted of 20 items, the remaining three subjects consisted of 25 items each. The participants were expected to respond to the test items in 30 minutes. The mean score of each student in the four subjects was computed and used as proxy for academic performance. The Academic Motivation Scale (AMS) was constructed by the researchers after an extensive review of literature. It was used to measure the academic motivation of students. It consisted of two sections, A and B and had 22 items. Section 'A' consisted of five (5) items which focused on the demographic characteristics of the participants. Section 'B' contained seventeen (17) items which measured the academic motivation of the participants. All the items in this section were structured on a four-point, Likert-type scale of Strongly Agree (4), Agree (3), Disagree (2) and Strongly Disagree (1). The AMS had a Cronbach Alpha Reliability Coefficient of 0.75.

Procedure

The research instruments were personally administered by the researchers. At each of the Junior High Schools used for the study, all the selected students were gathered in a classroom. The purpose of the study was explained to the students after which the research instruments were administered. The Academic Motivation Scale (AMS) was the first instrument to be administered. It was followed by the tests in Mathematics and English Language. The participants were given a fifteen-minute break, after which the Social Studies and Integrated Science test were administered. Each of tests was scored out of 100 and the mean score of each participant in the four (4) tests was computed and used as proxy for academic performance.

RESULTS

The Pearson Product Moment Correlation Coefficient statistic was used to analyse data for the first hypothesis. The results of the analysis are shown in Table 1.

Table 1: Results of Pearson Product Moment Correlation between Academic Motivation and Academic Performance of Students in Ghanaian JHS (N =1,470)

Variable	Mean	SD	r	df	p-value
Academic Motivation	61.563	7.111	.306**	1468	000
Academic Performance	52.604	11.858			

** Significant, $p < 0.01$ (two tailed)

The results in Table 1 reveal that there is a statistically significant relationship between academic motivation and academic performance of students in Ghanaian JHS ($r = .306$, $df = 1468$, $p < 0.01$). The information reveals a positive relationship between academic motivation and academic performance of students in Ghanaian Junior High Schools.

To analyse data for hypothesis 2, t-test was used. The results of the analysis are shown in

Table 2.

Table 2: Results of t-test of Academic Motivation of Students in Ghanaian Junior High Schools by Gender (Male/Female)

Gender	N	Mean	SD	t-value	df	p-value
Male	756	68.270	7.416	0.057	1468	.955
Female	714	68.250	7.441			

The results in Table 2 indicate that statistically, there is no significant difference between the academic motivation of male and female students in Ghanaian Junior High Schools ($t = .057$, $df = 1468$, $p = .955$). To analyse data for the third hypothesis, t-test was used. The results of the analysis are shown in Table 3.

Table 3: Results of t-test Analysis of Ghanaian JHS Students Academic Motivation by Location (Urban/Rural)

Gender	N	Mean	SD	t-value	df	p-value
Urban	750	62.420	6.902	4.749*	1468	.000
Rural	720	60.671	7.220			

Significant, $p < 0.05$

The data in Table 3 reveal a statistically significant difference between the academic motivation of students in urban and rural Junior High Schools in Ghana. The data shows that students from Urban Junior High Schools had a mean score of 62.420 and a standard deviation of 6.902 on the Academic Motivation Scale; while their colleagues in the Rural Junior High Schools had a mean score of 60.671 and a standard deviation of 7.220. The data also shows a t-value of 4.749 and a p value of .000, indicating that students from Urban Junior High Schools had a higher academic motivation than their colleagues from Rural Junior High Schools.

DISCUSSION

The results of the study revealed a statistically significant relationship between academic motivation and academic performance of students in Ghanaian Junior High Schools. This finding suggests that students who are academically motivated are likely to persist in their school work, focus on academic activities and display classroom behaviours that facilitate their academic performance. This suggestion is consistent with the finding of Opare (1999), that an individual's motivation to work on his or her school work is a strong determinant of academic performance. According to him, a student who is determined to excel in school would work hard on his or her books in order to attain the desired level of performance.

Furthermore, this finding corroborates the suggestion by Durojaiye (1984), that students who are motivated to learn see problems as obstacles to be conquered and challenges to be met. He further explained that such students tend to work hard academically at school even in the absence of any external reward or demand. Also, this finding harmonizes with the suggestion that academic motivation plays a significant role in influencing several college outcomes (Pascarella, Wolniak, Pearson, & Flowers, 2004). This finding also buttresses the assertion by Akey (2006), that students' beliefs about their competencies and expectations for success in school are linked to the students' level of engagement as well as emotional states that promote their ability to be academically successful. While this finding supports the finding of Blank as cited by Muola (2010), that students who are high in academic motivation are more likely to have increased levels of academic achievement, it contradicts the finding of Niebur, as cited by Halawah (2006). Niebur in a study found that academic motivation did not have any effect on the academic performance of students.

The results of the study did not show a statistically significant difference between the academic motivation of male and female students in Ghanaian Junior High Schools. This finding is not surprising because in recent times, there has been a strong advocacy for girl-child education in Ghana from the government and civil societies. Equal opportunities are given to both male and female students in terms of access to school, provision of material and psychological support by government, civil societies, parents and teachers.

In some instances, scholarships and other forms of incentive packages are extended to female students who persist in school and perform creditably in their academic work. With these measures in place, both sexes tend to be competitive, venturesome, open-minded, and see themselves as equal competitors in the pursuit of their academic work. This finding however, contradicts the results of previous studies by Tella (2007), and Balarabe and Abdullahi (1996). Tella (2007), in a study found that gender differences were significant when the impact of motivation on achievement was compared between male and female students ($t = 9.4$, $t_{crit} = 1.96$, $df = 448$ at 0.05 level). The results showed that male students had a higher mean score than their female counterparts. Balarabe and Abdullahi (1996), on the other hand, found female students to be higher in achievement motivation than their male counterparts ($t = -1.98$, $df = 302$, $p = 0.048$). Also, female students had a higher mean score than their male counterparts.

The study has provided evidence to suggest an urban-rural dichotomy in the academic motivation of students. The results showed that students in Urban Junior High Schools were higher in their academic motivation than their colleagues in the rural schools. This finding harmonises with the observation by Adepaju (2008), that the environment (urban or rural) in which an individual finds himself or herself goes a long way in determining his or her learning ability and by extension, his or her motivation to learn. This is so because, the location (urban or rural) of a school may influence the quality of teachers or educators, availability of facilities such as school buildings, furniture, learning materials and libraries. While schools in the urban areas are likely to attract, recruit and retain good teachers, provide good and conducive learning environments, schools in the rural areas may not be able to do so.

The schools in the rural areas lack furniture, learning materials and libraries. These constraints may result in deteriorated school atmosphere and may affect the quality of teaching and learning, which in turn, may affect students' motivation to learn. This suggestion is consistent with the argument by Good and Brophy (1986), that when the features of a school's environment, namely, physical, social and academic are harmoniously perceived by students, they are stimulated to work hard. On the contrary, if the teaching-learning encounter and the physical dimensions of the school environment are perceived negatively by students, their motivation to work hard is likely to be affected.

CONCLUSION

Based on the findings of the study, it is concluded that academic motivation is a sine qua non to the academic performance of students. This is because students who are academically motivated are likely to plan and set their academic goals and strive with passion to achieve these goals. They are also likely to invest all their attention and effort in their academic work and see academic challenges as obstacles to be conquered.

RECOMMENDATIONS

1. The study indicated a positive correlation between academic motivation and academic performance of students. Students who are well motivated in class are likely to direct all their efforts and personality toward achieving their academic goals. It is imperative; therefore, that teachers, parents and all concerned with the education of children to put in place psychological processes that are intended to boost the ego of the students, thereby, making them to have an inner feeling of satisfaction when they are able to accomplish an academic task. These psychological processes could include praises, words of encouragement and in some case tangible rewards and recognition.
2. Gender difference in the academic motivation of students was not established by the study. Male and female students had the same level of academic motivation. To sustain this level of academic motivation in the students, parents, teachers, and the Ghanaian society as a whole, should extend the same level of support either psychologically or materially to both sexes. Both sexes should be seen as equal competitors in the education field and any form of gender bias or discrimination in terms of opportunities and support should be avoided.
3. The study revealed an urban-rural dichotomy in terms of the academic motivation of students. Students in Junior High Schools in the urban areas had a higher academic motivation than their counterparts in Junior High Schools in the rural areas. To bridge this dichotomy, it is recommended that the Ghana Education Service in conjunction with the Ministry of Education and the District Assemblies should as a matter of urgency try to upgrade the facilities in Junior High Schools in the rural areas to the standards of schools in the urban areas. The Ghana Education Service should make good its incentive packages to teachers who accept postings to schools in the rural areas. It is envisaged that with these measures in place, they will make the schools in the rural areas attractive to both the students and teachers and by extension initiate, direct and sustain their interest in school work.

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