

Parental Involvement, Interest in
Schooling and School Environment as
Predictors of Academic Self-Efficacy
among Fresh Secondary School
Students in Oyo State, Nigeria

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Abstract

The purpose of this study was to investigate the impact of parental involvement, interest in schooling and school environment on academic self-efficacy of fresh secondary school students. Two hundred and fifty students constituted the study's sample. Both the independent and the dependent variables were measured with relevant standardized instruments. Two research questions were answered in the study. The results showed that the independent variables both jointly and relatively contributed significantly to the prediction of academic self-efficacy of fresh secondary school students. On the strength of these findings, the need to foster home-school partnership, enhance student interest and make the school environment child friendly was stressed and advocated.

Key words: Parental involvement; Interest in schooling, School environment, Academic Self-efficacy

Introduction

Life is characterized with transitional events and because transition is a journey of uncertainty, the experience may be traumatic. As young adolescents make the transition from elementary school to secondary school, they are caught up in the web of transitional experience. Adolescence itself is a transitional stage of life and hence its riotous nature. As adolescents transition to high school, they may experience problems in educational, social-personal and vocational related aspects of life. As pointed out by Phelam, Yu and Davidson (1994), the transition into high school can be an unpleasant experience. In a related comment, Hertzog, Morgan, Diamond and Walker (1996), expressed the view that adolescents in this category view themselves more negatively and experience an increased need for friendship. Their transitional ordeal goes beyond all of the above as they have been found to experience a decline in grades and attendance (Barone, Agurre-Deendreis & Trickett, 1991).

The expanded curriculum of secondary school, specialization approach to teaching, large size classroom, expansive school environment and meeting strange faces, all of which constitute new experiences to fresh students, may impact significantly on the academic self-efficacy of students.

The purpose of the present study was to find out the extent to which parental involvement, interest in schooling and school environment can impact academic self-efficacy of fresh students. And if they do, make recommendations for greater parental involvement, enhancing students' interest and improving school environment.

Review of Literature

Parental Involvement

The child's first place of contact with the world is the family. The child, as a result, acquires initial education and socialization from parents and other significant persons in the family. The parents are, in short, the child's first teacher. They are the first and primary source of social support for young children. In the African setting, the responsibility for raising a child is a collective one. When parents are involved in the education of their

children, children tend to model their parents' attitude and actions. Suffice it to say that parents exert profound influence on every aspect of a child's life.

Available and accessible research evidence have indicated that students with parents who are involved in their education tend to have fewer behavioural problems and better academic performance and are less likely to drop out of school than students whose parents are not involved in their school (Grotruck, 1987; Rich, Van Dlen & Mallox, 1979). Corroborating the above findings, Reyholds (1994) demonstrated that a significant relationship existed between parental involvement and academic achievement.

Previous research work has made evident the positive impact of parental involvement on academic achievement. The major focus of the present study was to find out if parental involvement together with interest in schooling and school environment could predict academic self-efficacy.

Interest in Schooling

The importance of interest in whatever a person does cannot be underestimated. When it comes to making choices, interest is of considerable importance. As pointed out by Dewey (1913), interest is a two-dimensional construct which involves identification and absorption. Dewey's conceptualization is very important in educational enterprise as the relationship between identification, absorption and self-initiated activity offers a straightforward way to analyse school activities. Schiefelle (1991) defined interest from the point of specification of content domain. In particular, Schiefelle (opt. Cit) proposed the following.

1. Interest is a content-specific concept. It is always related to specific topics, tasks or activities.
2. When understood as content-specific, interest fits well into the modern cognitive theories of knowledge acquisition in that new information is always acquired in a particular domain.
3. Subject-matter specific interest is probably more amenable to instructional influence than are general motives.

Making a distinction about the structure of interest, Hiddi and Anderson (1992) identified two forms of interest, namely, personal and situational interest. Personal interest is defined as an interest people bring into a situation. For instance, a student can approach a learning situation with or without interest. Situational interest, on the other hand, refers to an interest that people acquired by participating in an environment or context. For the purpose of this study, interest is directly tied to the child in relation to school. Both aspects of interest (personal and social) are of key importance.

Empirically, interest in schooling has been found to contribute significantly to the academic achievement of students. For instance, Odinko and Adeyemo (1999) found that interest in schooling together with other socio-psychological factors were good predictors of students' learning outcome in English language. Again, Odinko and Adeyemo (1999b) discovered that interest in schooling predicted students' attitude to English language. In the present study, the emphasis is to ascertain the effect students' interest could have on their academic self-efficacy.

School Environment

School environment describes the school psychological environment or what others have referred to as 'the school ethos', 'school cultures' or the school climate (Machr, 1991). The emphasis here is on the individual or student operating within a given educational context. In this instance, it is the student's perception of the school environment and his/her reaction to those perceptions that are of importance.

The school psychological environment could be seen from two perspectives. These are: (1) the goal dimension and (2) the relationship dimension. First, there is increasing evidence that the students' perception of achievement goal structure both within the classroom and the school in general are related to their self-perception, use of effective learning strategies, efforts and persistence (Ames, 1992; Midgley, Anderman & Hicks, 1995).

The physical environment also affects the behaviour and development of people, of both children and adults who function within it. Hence, school environment encompasses both the socio-psychological and physical dimensions, and both exercise reciprocal effect on each other. Research evidence as documented by Boekaerts (1993) had indicated that a supportive

academic setting is considered by students as an extension of their personal resources and that it serves to reduce anxiety and negative affect that can arise in achievement settings. Further, research evidence as established by Eccles and Midgley (1989) also showed that students' perception of the goal dimension of the school environment is strongly related to their perception of the relationship dimension of school environment.

Stressing the importance of secondary school environment, Bandura (1997) is of the view that good schooling fosters psychological growth that contributes to the quality of life beyond the vocational domain. Stretching his position further, he stated that the goal of formal education should be to equip students with intellectual tools, efficacy beliefs and intrinsic interest to educate themselves in a variety of pursuits throughout their lifetime (p. 214).

From the evidence gathered in the literature, it is crystal clear that the independent variables being considered in this study affected school activities in diverse ways. The interest of the present study, however, was to ascertain the combined and relative effects of parental involvement, interest in schooling and school environment on academic self-efficacy. The question then is: what is academic self-efficacy?

Academic Self-Efficacy

The construct of self-efficacy emerged as a central and popular issue in psychology following Bandura's (1977) seminal publication of 'Self-efficacy theory: Towards a unifying theory of behavioural change'. The theory was situated within the context of social cognitive theory of human behaviour that was slightly diverted from the existing cognitivism of the day. The theory also encompasses cognitive development within a socio-cultural network of influences. As a further step to solidify the theoretical base of self-efficacy theory, Bandura (1997) situated self-efficacy within a theory of a personal and collective agency that operates in concert with other socio-cognitive factor. In the academic realm, self-efficacy belief has received increasing attention in such areas as academic motivation and self-regulation (Pintrich & Schunk, 1995). Other areas of education where self-efficacy has been found relevant include attributes, goal-setting, modelling, testing, domain specific anxiety, reward contingencies, strategy training, and other self-beliefs and expectancy constructs.

As defined by Bandura (1977, 1987) self-efficacy is concerned with people's judgment of their capability to organise and execute a designated type of performance. In 1997, Bandura proposed a definition not too different from his earlier conceptualization. In this instance, he defined self-efficacy as the belief in one's capability to organise and execute courses of action required to produce given attainment. Academically, self-efficacy refers to one's perceived capability to perform given academic tasks at the desired level (Schunk, 1991).

Empirical studies have demonstrated interwoven relationships between self-efficacy and learning outcomes. In a series of studies done by Pajares and Krasler (1994, 1995) and Pajares (1996), it was established that the direct effect of self-efficacy was as strong as the effect of general mental ability and that there was an interplay between mathematic self-efficacy and mathematical problem-solving of middle school students.

Further relevance of academic self-efficacy was demonstrated by Adeyemo (2001) when he found that students' curricular option was influenced by self-efficacy. Again Pintrich and DeGroot (1997) concluded from their study that academic self-efficacy correlated with semester and final year grades in class seatwork, homework, examinations and quizzes, essays and reports. Thus, self-efficacy played a facilitative role in the process of cognitive engagement.

Based on the available evidence, there is no doubt that academic self-efficacy significantly influences school activities and student academic performance as a whole. The issue therefore is this: if academic self-efficacy is so important in educational enterprise, how do we then identify factors that could predict it among fresh students. This, therefore, is the purpose of the present study.

To achieve the aforementioned objective of the study, the following research questions were raised and answered in this study:

1. What is the joint effect of parental involvement, interest in schooling, and school environment (independent variables) on the academic self-efficacy of fresh secondary school students?

2. Concerning parental involvement, interest in schooling and school environment, what is the relative effect of each on the academic self-efficacy of the subjects?

Method

Research Design

The study adopted an ex-post-facto research approach. It is, therefore, an after-the-fact study. Such an approach does not involve the manipulation of variables in the study. It neither adds to nor subtracts from the existing facts. It only carefully observes and records information as it naturally occurred at the time the study was conducted.

Subjects

Twenty secondary schools selected through stratified random techniques were used in the study. In each of the randomly selected schools, participants were selected through a simple random technique. On the whole, two hundred and fifty students (250) comprising 130 boys and 120 girls participated in the study. All subjects were fresh students in junior secondary class one (JSS 1). Their age ranged between 9 and 12 years with a mean age of 11.5 years.

Instrumentation

Parental Involvement

The family involvement questionnaire constructed by Fantuzzo, Tighe, and Child (2000) was used as a measure of parental involvement. It is a forty-two item scale with response anchor based on Likert 4-point format. Some of the items of the scale read as follows: (1) 'My parents participate in parents/teachers activities in the school', (2) 'My parents always check on my school work everyday', (3) 'My parents always emphasize doing school assignments and reading at home'. The three scale factors demonstrated adequate

internal consistency with Alpha coefficient $\geq .70$. The reliability indices for the three subscales are: .85 for Section A; .85 for Section B and .81 for Section C.

Interest in Schooling Scale

The interest in schooling scale developed by Mitchell (1993) was used as a measuring tool. It was modified by Umoinyang (1998) to suit the Nigerian environment. It is a ten-item scale with response format ranging from strongly agree (4) to strongly disagree (1). As indicated by Umoimyang (1998), the instrument has a Cronbach alpha value of 0.79.

School Environment Scale

The school environment scale was constructed by the researcher. It is a fifteen item scale designed to elicit respondents' opinion about their school environments. The school environment was categorized into physical and social-psychological environments. Relevant items were generated and developed as the school environment scale. The instrument has a total of fifteen items with response anchors ranging from strongly agree (4) to strongly disagree (1). The scale has a theoretical value ranging between 15 and 60. It has a test-retest reliability index of 0.76.

Academic Self-Efficacy Scale

The Morgan-Jinks student self-efficacy scale developed by Morgan and Jinks (1999) was used to assess the academic self-efficacy of the subjects. The instrument is a thirty-item scale and had an overall reliability coefficient of 0.82. The subscales Alphas were 0.78 for talents, 0.70 for context and 0.66 for efforts. The instrument has a response format ranging from 'Really agree (1) to Really disagree (4).

Procedure

The instruments were administered to the subjects on days approved by the school authorities for the exercise. The investigator was assisted by school guidance counsellors in the administration and collection of the instruments. In each of the selected schools, the instruments were administered and collected on the same day of the administration. On the

whole, data collection lasted for three weeks. Out of the three hundred questionnaires distributed; only 250 were properly filled in and considered useful for research purpose.

Method of Data Analysis

The multiple regression analysis, ANOVA and t-test statistical tools were employed to analyse the data.

Results

Table 1 contains descriptive statistics and intercorrelations among the study variables. As shown in Table 1, academic self efficacy correlated with: (1). Interest in schooling ($r = .241$; $P < 0.05$); (2) School environment ($r = .302$; $p < 0.05$) and (3) Parental involvement ($r = .314$; $p < 0.05$). There were also significant correlations among the three independent variables.

Table 1: Descriptive statistics and intercorrelations among the variables

Variables	N	Mean	SD	Academic self efficacy	Interest in schooling	School environment	Parental involvement
Academic self efficacy	250	65.3520	15.92238	1.000			
Interest in schooling	250	29.1960	4.67730	-.241**	1.0000		
School environment	250	30.7040	5.43752	.302**	.677**	1.000	
Parental involvement	250	43.8080	10.84887	-.314**	-.231**	.214**	1.000

N = 250, Correlations greater than .21 are significant at $P < .05$, ** $P < .001$.

The first research question sought to find out the combined effect of parental involvement, interest in schooling and school environment (independent variables) on academic self-efficacy of the subjects. The result is presented in table 2 below.

Table 2: Multiple regression analysis on Academic Self-Efficacy Data

Multiple R (adjusted) = 0.483				
Multiple R ² (adjusted) = 0.224				
Standard Error of Estimate = 5.12				
Analysis of Variance				
	Sum of Squares (SS)	df	Mean Square	F
Regression	1960.332	3	653.444	24.944
Residual	644.424	246	26.197	
	8404.755	249		

The table above shows that the independent variables (parental involvement, interest in schooling and school environment) when pulled together have significant effect on the academic self-efficacy of the subjects. The values of R (adjusted) = 0.483 and R² (adjusted) = 0.224. The analysis of variance performed on multiple regression yielded an F-ratio value of 24.944 and was found to be significant at 0.05 level.

Table 3: Relative contributions of the independent variables to the Prediction

MODEL	UNSTANDARDIZED COEFFICIENTS		STANDARDIZED COEFFICIENTS	t	p
	B	STANDARD ERROR	BETA		
Constant	28.395	2.909		9.7 cal	<0.05
Parental involvement	.289	.066	.259	4.39	<0.05
Interest in schooling	.219	.085	.173	2.57	<0.05
School environment	.174	.057	.212	3.05	<0.05

The above table shows that each of the independent variables made a significant contribution to the prediction of academic self-efficacy. In terms of the magnitude of contribution, parental involvement made the most significant contribution (Beta = .259; t = 4.39; P < 0.05) to the prediction. Other variables made significant contributions in the following order: school environment (Beta = .212; t = 3.05; P < 0.05) and interest in schooling (Beta = .173; t = 2.57; P < 0.05).

Discussion

The result of the first research question revealed that the three independent variables have a joint effect on the academic self-efficacy of the subjects. The magnitude of the effectiveness of the three independent variables was reflected in the value of $R = 0.483$ and R^2 (adjusted) = 0.224. The result thus demonstrated that 22.4% of the variance in the academic self-efficacy of the fresh students is accounted for by the linear combination of the three variables. The result was further strengthened by the value of F-ratio ($F = 24.944$, $P < 0.05$). What the results are saying is that the capacity of the three independent variables to predict academic self-efficacy could not have happened by chance. This finding is in consonance with the work of previous researchers (Beinpechat, 1990; Odinko and Adeyemo, 1999; Eccle and Midgley, 1989; Kim and Rohner, 2002, Balkcom, 2002 and Roth, 1998).

The significant impact of parental involvement on academic self-efficacy is best understood when it is realized that most parents have great expectations for their children. It is the desire of most parents that their children should excel in life and they would not leave any stone unturned to make sure that their children are given the necessary support. In situations where the school and the home are working towards the same goal, the result is a happy one. It is in this perspective that the relationship between parental involvement and academic self-efficacy should be understood.

After parental involvement, in terms of contribution to the prediction of academic self-efficacy, is school environment. The importance of the school milieu in the academic development of the child cannot be underestimated. As indicated by Bandura (1997), the school is the place where the child develops cognitive competencies and acquires the knowledge and the problem-solving skills essential for participating effectively in the society. He further postulated that formal instruction is but one part of the milieu that forms competencies. He went on to say that those who have a sense of efficacy in mastering academic tasks tend to learn better in formal school environments as well as in informal environments outside the school. Suffice it to say that the school environment impacts the academic self-efficacy of the subjects. As new entrants arrive at secondary school, the school environment presents a lot of challenges and task varieties which may have motivational effects on the new entrants.

Although interest in schooling made the least contribution, it is, however, significant. Though school may not be equally interesting to people in it, the euphoria that normally accompanies entering secondary school may generate heightened interest in schooling and this may have spiraling effects on students' academic self-efficacy.

Implication of the Findings

It is important to mention the implication of the present study for educational and counseling applications. First, there is the need to forge home-school partnership for the purpose of not only enhancing the academic well-being of the students but their overall well-being as well. The responsibility of educating the child should not be left to the school alone. For the child to be academically efficacious, the need to foster the home-school partnership is indeed highly germane. As parenting and parental involvement practices require training, school counselors can organize seminars and/or workshops where parents are exposed to parenting skills and practices.

As fresh students may encounter frustrating situations in secondary school, the school authority should consider it necessary to organise orientation programmes for the new intakes. They would need to be guided and counselled on the various aspects of school life. Educational, social-personal and career counseling, all of which can enhance the psychosocial environment of the school, should be provided for the new intakes. The school physical facilities and plants should be put in proper shape in preparation for resumption and continue to be maintained even thereafter. Parental involvement and creation of enabling school environments will help to foster the children's interest in schooling and make them develop high academic self-efficacy. Both the home and the school have the onerous responsibility of improving their psychophysical environment and of making the home and the school child-friendly, as these are prerequisites for enhancing the academic self-efficacy of the children.

In furtherance of the above, it should be known and noted that the development of academic self-efficacy is rooted in learning by observation and direct personal experience (vicarious learning) in a wide spectra of contexts. Consequently, programmes designed to improve the quality of education should lay emphasis on giving students the opportunities to participate in school activities and decision-making.

As children spent 87% of their waking life with parents and the remaining 13% in school, (Hoover, Dempsey and Daddler, 1995), and the present study has further confirmed a strong link between parental involvement and academic self-efficacy, there is the need for policy makers to put in place an appropriate policy framework that will facilitate parents' involvement in the education of their children.

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