



The Quality of Learning Environment and Academic Performance from a Student's Perception

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Abstract

The study determined how students assess the various components of their learning environment. It also identified how the learning environment affects students' learning outcomes. A sample of 370 randomly selected students was taken from a population of Bumiputera's students. Data analysis was done using descriptive statistics and Product Moment Correlation. Findings revealed that students could assess the four components that contribute to their academic performance, which is: facilities provided (11 items), housing environment, parents motivation, school and teacher factors. Housing environment and parent's motivation has the highest assessment while facilities provided at home have the least. The results also showed that only two components of the learning environment are positively correlated with students' academic performance that is housing environment and school/teacher involvement. The findings are discussed with a view to improve the quality of the learning environment, subsequent academic performance.

Keywords: Quality, Learning, Environment, Facility, Conception

1. Introduction

Intelligence is not the only determinant of academic achievement of a student. Academic achievement of a student is always associated with the many components of learning environment. According to Bosque and Dore (1998), learning and teaching environment ought to implement six functions: inform, communicate, collaborate, produce, scaffold, and manage. They added that conceptually speaking, the learning environment refers to the whole range of components and activities within which learning happens. Based on the Sandberg's (1998), the definition on the functions of a learning environment can be quoted as "Teacher component's role is to provide something between loose guidance and direct instruction. It can be a human agent (present or distant), an intelligent agent, and instructions like some text books provide. This component provides information from the syllabus to the task level"

Student's motivation for learning is also generally regarded as one of the most critical determinants, which contribute to the success and quality of any learning outcome (Mitchell, 1992). Research shows that student's perceptions of academic competency decline as they advance in school (Eccles, Wigfield, & Schiefele, 1998). Schunk and Pajares (2002) attribute this decline to various factors, including greater competition, less teacher attention to individual student progress, and stresses associated with school transitions.

Another important determinant, which shouldn't be neglected, is the family. Family is the primary social system for children for all cultures across the region. Rollins and Thomas (1979) found that high parental control were associated with high achievement. Religiosity as an aspect of the family environment is another independent variable possibly influencing academic achievement (Bahr, Hawks, & Wang, 1993). Cassidy and Lynn (1991) explored how family environment impacts motivation and achievement. This means that motivation served as a mediating variable between home background, personal characteristics, and educational attainment. Higher-achieving students are likely to have the following characteristics: positive feelings about their school experiences; attribute their success in high school to such things as hard work, self-discipline, organization, ability, and high motivation; tend to watch relatively little television

during the school week; tend to associate with students who also were successful in school; and avid readers (WEAC, 2005).

A study by Niebuhr (1995) examined relationships between several variables and student academic achievement. His findings suggest that the elements of both school climate and family environment have a stronger direct effect on academic performance. Academic performance is typically assessed by the use of teacher ratings, tests, and exams (Howse, 1999). Students were usually more motivated by teachers who cared about student learning and showed enthusiasm. According to Niebuhr (1995) there is no significant effect on the relationship of individual motivation and its effect on academic achievement. Another study by Boggiano *et. al.* (1991), regarding differences in gender in motivation, found that females were significantly more extrinsic than males. Male students' performance accords their interest level more than is the case for female students. Specifically, female students' academic performance is less associated with their interests than male students' academic performance (Schiefele *et. al.*, 1992).

Study done by Hammer (2003) the home environment is as important as what goes on in the school. Important factors include parental involvement in their children's education, how much parents read to young children, how much TV children are allowed to watch and how often students change schools. Achievement gap is not only about what goes on once students get into the classroom. It's also about what happens to them before and after school. Parents and teachers have a crucial role to play to make sure that every child becomes a high achiever. Parental influence has been identified as an important factor affecting student achievement. Phillips (1998) also found that parental education and social economic status have an impact on student achievement. Students with parents who were both college-educated tended to achieve at the highest levels. Income and family size were modestly related to achievement (Ferguson, 1991). Peng and Wright's (1994) analysis of academic achievement, home environment (including family income) and educational activities, concluded that home environment and educational activities explained the greatest amount of variance.

Therefore, this paper is designed specifically to study the conception of Bumiputera students on what are the facilities that help learning, housing environment, parent's motivation, school and teacher factor on their academic achievement. Research in this area should increase the awareness to concentrate on student's motivation in an effort to increase effective institutional, family and support system functioning in the later years and eventually improve our educational stature.

2. Methodology

2.1 Instrument and variables

An instrument was given to a student randomly to measure the variables of the study. It is divided into 5 parts. The first and second parts, deals with the background of the student and the family, third part on the housing conditions- type of house, number of bedrooms, electrical items (11 items) etc in the house, fourth part on the high school grade and the learning factors that contribute to the grade, and the last part on the higher education factors, two example of question: "Why they choose to further their study?, Why they choose the program? Some of the item use yes or no and some of the item was measured using a Likert scale that ranged from "strongly disagree" (1 point) to "strongly agree" (5 points). Academic achievement was measured using the number of A's during high school examination.

2.2 Respondents

The study was conducted at UiTM, main campus Shah Alam and six affiliated colleges of UiTM., namely Institut Professional Baitulmal, Institut Teknologi Perak, Kolej Unikop, Kolej Yayasan Terengganu, Kolej Shahputra, Kolej Teknologi Timur. A total of 370 students (75 males and 296 females) with average age of 20.5 years responded to the items of the instrument. Respondents were guaranteed confidentiality, and the instrument was filled in anonymously with no identification information.

2.3 Procedure

Reliability of each part of the instrument was assessed through calculating the Cronbach Alpha reliability test. Relationship between parents motivation, family/housing environment, student/teacher environment and academic achievement were assessed by using product moment correlation correlations among these variables.

3. Results and discussion

The internal reliability of each of the three scales in the instrument was estimated. Table 1 shows number of items, Cronbach's alpha reliability for each scale. Considering that reliability is a function of number of items in an instrument and that number of items is relatively small, the three scales were considered internally reliable.

<<Table 1. Reliability of the items>>

Table 2 provides the demographic profiling of a respondent. The female respondent is 80% and male respondent 20%, which reflect the current enrollment situation in most IPTA and IPTS. Majority of the respondent age 18-22 (91%) and

only (9%) age of 23-30 years old. Most of the respondent staying with their parents (86%), and range of siblings from 1-4 (45%) and 4-8 (49%).

<<Table 2. Demographic profiling of a respondent>>

Table 3 summarizes the result of facilities in 11 categories. These finding shows that school play an important role that contributed to the student's performance, where school tuition/ extra class (65%) and school motivation program (67%) reflects the highest percentage. Distance form school (46%) and own study table (46%) and followed by having their own room (43%). Thus from this result we can conclude that school as an organization is a crucial element in determining the success of the student (Calbaugh & Rozyeki, 1990).

Comparisons from the other three components, the finding reveal that housing environment, basic needs (97%) and study needs (88%) shows high contribution to the academic performance of the student during their high school year. This followed by school/teacher involvement (82 %) in their study, and encouragement by parents to enroll to university (78%). Wang *et. al.* (1996) indicate that parent encouragement are strongly related to improved student achievement.

<<Table 3. Descriptive result of facilities that contribute to student academic performance>>

<<Table 4. Pearson product moment correlations among achievement, housing environment, parents motivation, school/teacher environment>>

Table 4 shows the correlations between achievement and housing environment (0.195) and between achievement and school/teacher environment (0.166) were statically significant, these values were still practically small. Achievement and parent's motivation were not correlated. Cassidy and Lynn (1991) included a specific factor of the family's socioeconomic status, crowding, as an indicator of how being disadvantaged. They found that a less physically crowded environment, along with motivation and parental support, were associated with higher educational levels of children.

4. Conclusion

The purpose of this study was to explore the Bumiputera's student's conception on what they perceived is important to achieve good academic performance. The results revealed that the key element that contributes to their achievement is the organizational factors, the extra class and motivational programmes provided by the school. The teacher involvement in their study is also very importance determinant that associated with the student academic performance. On the social factors, by having their own study table, own room and computer will be an added advantage to their achievement in school.

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Table 1. Reliability of the items

	Items	Cronbach Alpha
A. Facilities provided	10	0.58
B. Housing environment	2	0.73
C. Parents motivation	2	0.67
D. School/ teacher environment	2	0.40

Table 2. Demographic profiling of a respondent

Items	Percentage
Gender	
Male	20
Female	80
Race	
Melayu	98
Bumiputera Sabah/ Sarawak	2
Age	
18 -22	91
23-30	9
Staying with	
Parents	86
Mother	9
Farther	2
Relatives	3
No of siblings	
1 to 4	45
5 to 8	49
9 to 13	6

Table 3. Descriptive result of facilities that contribute to student academic performance

Components	Percentage			100%		
A. Facilities provided	Yes	No	Not sure			
Distance of school from house	46	51	3	100		
School bus	27	71	2	100		
School tuition/extra class	65	32	3	100		
House tuition/ tuition centre	38	60	2	100		
Computer in school	37	61	2	100		
Computer at home	41	57	2	100		
Own room	43	54	3	100		
Own study table	46	52	2	100		
School motivation program	67	31	2	100		
Parents motivation program	16	84	0	100		
Government financial	13	84	3	100		
B. Housing environment	Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree	
Basic needs are fulfill	70	27	2	1	0	100
Study needs are fulfill	48	40	6	6	0	100
C. Parents motivation						
Concern about my study	62	36	1	1	0	100
Encouragement to university	78	20	1	1	0	100
D. School/ teacher environment						
School Infrastructure	19	45	19	14	3	100
Teachers involvement	37	45	14	3	1	100
E. Other						
Private Tuition	17	45	23	12	2	99

Table 4. Pearson product moment correlations among achievement, housing environment, parents motivation, school/teacher environment

	Achievement
Achievement	1
Parents motivation	-0.89
School/teacher environment	-0.166**
Housing environment	-0.195**

** Correlation is significant at 0.01 level (2 tailed)