

The Correlation among Teachers' Expectations and Students' Motivation, Academic Self Concept and Academic Achievement

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Abstract

The main purpose of this study was to investigate the relationships that exist among teachers' expectations and other student related variables and it also intended to inspect whether there are significant differences between male and female students in the way they perceive their teachers' expectations, and in their motivation, academic self-concept and academic achievement. Perceptions of teachers' expectations scale with reliability of 0.792, motivation scale with reliability of 0.879, and academic self concept scale with reliability of 0.833 were administered and Pearson product moment correlation coefficient and independent sample t-test were employed to analyze the data. The correlation results showed statistically significant relationships among the variables at the 0.05 alpha levels, with the exception of the relationship of sex with academic self concept and motivation; and the relationships of motivation and perceptions of teachers' expectations with academic achievement of students. The results of independent sample t-test also showed that there were significant mean differences in academic achievement and perceptions of teachers' expectations between male and female students. Boys achieved higher mean achievement scores while girls claimed higher level of teachers' expectations (i.e. favorable expectation) than boys. But, no significance mean differences in motivation and academic self concept were observed between male and female students. Lastly, based on the results of the study implications were discussed and recommendations to solve the problem were forwarded.

Keywords: Students' perceptions, Teachers' expectations, Motivation, Academic Self- concept, Academic achievement.

1. Introduction

Education is a process by which human beings transmit their experiences, new findings, and values accumulated over the years, in their struggle for survival and development, through generations. It also enables individuals and society to participate in developmental processes by acquiring knowledge, ability, skills and attitude (Education and Training Policy [ETP], 1994).

The history of economic growth and development through education are strongly evidenced. No country has scored sound economic growth and development without education. Education, as a means for developing human capital, is critical for economic growth and poverty reduction. The economic, social and cultural advancement of a country depends on its education system. To implement this general idea, the government of Ethiopia is engaging in expanding education to reach all school-aged children (Ministry Of Education [MOE], 1994).

Besides, the government of Ethiopia has ratified education and training policy to enhance the educational opportunities of individuals and society. The goal of the education and training policy is to produce citizens endowed with humane outlook, countrywide responsibility and democratic values through the development of the necessary productive, creative and appreciative capacity in order to participate fruitfully in development process (ETP, 1994). To realize this goal the role of teachers is vital and they occupy the central position in the educational processes.

Teachers are the motors of the education process. They play significant roles in the success of their students. Teachers are expected to transmit and or help the transmission of the cultural heritage of the society (the knowledge, skills, customs, and attitudes acquired over the years) to the new generations so as to make education lively. They are also expected to develop in their students the ability to adjust themselves to a rapidly changing society. Therefore, the professional efforts of teachers highly determine the degree of the success of education in society generally, and the way students learn in classroom particularly. Moreover, to facilitate the learning of students there should be positive teachers' expectations that play a significant role in students' success in school (Crowl, Kaminsky & Podell, 1997).

Consciously or unconsciously, teachers often behave differently toward students based on the beliefs and assumptions they held about them that can be communicated positively or negatively (Brophy & Good, 1970; Rosenthal, 1973; Good & Weinstein, 1986). Teachers often communicate expectations in subtle, implicit ways. They may differentiate between boys and girls (Sadker & Sadker, 1985; Sadker & Kelin, 1991), students of lower and middle class membership (Podell & Soodak, 1993), and students from minority and majority cultures (Hernandez, 1989). When teachers treat students differently, two things happen: (a) teachers' expectations

become self fulfilling, and (b) students develop a self-image that perpetuates the differential treatments, particularly when applied to high and low achievers (Good & Brophy, 1991) (all cited in Crowl, Kaminsky & Podell, 1997).

The influence of the teachers and their teaching on student learning cannot be overemphasized. Therefore, as the current emphasis of ministry of education is more of on raising the level of performance and achievement of students, educators need to focus on developing and maintaining higher expectations for all ability level students through which the intended objectives could be achieved. Success in school does not only depend on the students' abilities or their efforts, but a combination of factors along with ability such as respect for students and the establishment of expectations set by teachers is critical (Geisler, 2001).

The study, therefore, sought to answer the following leading research questions: Are there significant relationships between teachers' expectations and students' motivation, academic self-concept and academic achievement? And Are there significance differences between male and female students in their perceptions of teachers' expectations, motivation, academic self-concept and academic achievement?

2. Methods

In order to answer the leading research questions, both qualitative and quantitative data gathering instruments were employed and the design of this study was descriptive survey type.

The target populations of this study were government general secondary school students of grades 9 and 10 at Bahir Dar special zone, Ethiopia. There were three government general secondary schools in the town. They were Tana Haik, Fasilo, and Ghion general secondary schools. These schools were selected using comprehensive (available) sampling method because all schools were included in the sample.

The total number of students in the selected schools was 6203 (3191 female and 3012 male). The size of sample could be determined by the researcher based on the nature of the study (Yalew, 2009; Fraenkel and Wallen, 2000). Therefore, the sample size was set to be 300 (146 males and 154 females) so as to make the sample manageable.

Of the 300 students taken out of 6203, 166 (55.47%) students were taken from grade 9 and 134 (44.53%) of them were from grade 10. In order to keep the proportionality of sample size across schools, grade level and sex, the researcher employed stratified random sampling technique. Once the population has been divided into subgroups, or strata, sample cases were selected using simple random from each subgroup.

In this study questionnaire was mainly used as data gathering instrument. It was used to measure students' perceptions of their teachers' expectations, their motivation and academic self-concept. Moreover, documents were also used to collect student's first semester average results so as to measure their academic achievement.

The questionnaire contained close ended items with Likert scale with four points ranging from 1 to 4, representing strongly disagree (1) to strongly agree (4). The questionnaire had four sections: in the first section students were asked to provide some demographic information, i.e. school name, sex, grade level, section and identity number (ID No). This was done to extract sampled students' academic achievement. The rest three sections of the questionnaires were measured students' perceptions of their teachers' expectations, their motivation and academic self concept. Items were prepared in Amharic. This was done to avoid the problem of language due to difficulty of comprehending the item.

Once the scales were prepared, they were given to experts in the area and colleagues for face validity purpose based on their comments, revisions and adjustments were made to avoid redundancies and retain good items. Some changes made were modifying wording, paraphrasing and cancellation of some of the items for the purpose of fitting the questionnaire for the current study. Then, the scales were administered to 30 students randomly selected from the same population to pilot test to improve the validity and reliability of the scales. The piloting was conducted at Ghion General Secondary School. After pilot study, the reliability of the scales was computed to check the internal consistency of the items. Final correction on confusing terms and statements were made to the questionnaire based on the pilot test results.

During scoring negatively worded items were reversely coded. The Cronbach Alpha (α) coefficients for perceptions of teachers' expectations, motivation and academic self-concept scales after the questionnaire was administered to all samples were 0.792, 0.879, and 0.833, respectively.

The data obtained from students and the record offices of schools were analyzed using quantitative method. For the quantitative data different statistical techniques were employed. Among these were mean, standard deviation, Pearson product moment correlation coefficient and independent sample t-test. To investigate the relationship among the variables, Pearson product moment correlation coefficient was used and independent sample t-test was used to see sex differences in those variables. The data were analyzed using Statistical Package for Social Science (SPSS) version 17.0.

3. Results

In order to check whether there were significant relationships among teachers' expectations and students' motivation, academic self concept and academic achievement correlation analysis was conducted and results are

presented in Table 1.

Table 1. Means, standard deviations and correlation matrix of sex, academic achievement, perceptions of teachers' expectation, motivation and academic self concept. (n = 300)

** Correlation is significant at the 0.01 level (2-tailed).

Variables	Means	SD	Correlation coefficients					
			Sex	A.A	PTE	Mot	ASC	
Sex			1.000					
A.A	58.2645	10.54665	0.245**	1.000				
PTE	42.55	7.920	-0.123*	0.075	1.000			
Mot	49.15	7.326	-0.046	0.107	0.412**	1.000		
ASC	54.03	8.167	0.051	0.259**	0.394**	0.628**	1.000	

* Correlation is significant at the 0.05 level (2-tailed)

Note: Sex code: Male=1, Female = 0; A.A = Academic achievement, ASC= Academic self concept, PTE = Perceptions of teachers' expectations, Mot = Motivation

The correlation results presented in the above Table showed statistically significant relationships among the variables at the 0.05 alpha levels, with the exception of the relationship of sex with academic self concept and motivation; and the relationship of motivation and perceptions of teachers' expectations with academic achievement of students.

Specifically, in Table 1, results showed that academic self concept is related positively and significantly with academic achievement ($r = 0.259, p < 0.01$), perceptions of teachers' expectations ($r = 0.394, p < 0.01$), and motivation ($r = 0.628, p < 0.01$). Motivation is related positively and significantly with perceptions of teachers expectations ($r = 0.412, p < 0.01$). Perceptions of teachers' expectations is also related negatively and significantly with sex ($r = -0.123, p < 0.05$), which shows females tend to perceive their teachers expectations to be more favorable than boys. Academic achievement is also positively and significantly related with sex ($r = 0.245, p < 0.01$), which indicates male students superiority over female students.

An independent sample t-test was conducted to see whether there exist significant differences in the level of perceptions of teachers' expectations, motivation, academic self concept and academic achievement between boys and girls.

Table 2: Mean differences in perceptions of teachers' expectations, motivation, academic self concept and academic achievement of male and female students.

Variables	Sex	N	Mean	SD	t-value	Sig.
Academic achievement	Male	146	60.7464	11.47003	4.045	0.000
	Female	154	55.9116	9.01341		
Perceptions of teachers' expectations	Male	146	41.50	7.744	-2.246	0.025
	Female	154	43.54	7.981		
Motivation	Male	146	48.73	7.254	-0.952	0.342
	Female	154	49.54	7.395		
Academic self concept	Male	146	54.38	8.020	0.722	0.471
	Female	154	53.69	8.317		

The results showed that there were statistically significant mean differences in academic achievement and perceptions of teachers' expectations between male and female students. It was found that the average academic achievement of male students was higher than their female counterparts; whereas female students perceived that their teachers' expectations were higher than they had towards male students. Although no statistically significant mean difference was observed in motivation and academic self concept between male and female students.

4. Discussions

The discussion of the results is presented in accordance with the leading research questions.

Q1- Are there significant relationships between teachers' expectations and students' motivation, academic self-concept and academic achievement?

The correlation results showed statistically significant relationships among the variables at 0.05 alpha levels, with the exception of the relationship of sex with academic self concept and motivation; and the relationship of motivation and perceptions of teachers' expectations with academic achievement of students.

Academic self concept is related positively and significantly with academic achievement. Marsh (1993) and Gordon (1997) also reported that academic self-concept and academic achievement are mutually reinforcing to each other to the extent that a positive (or negative) change in one facilitates a commensurate change in the other. Academic self concept is also related positively and significantly with perceptions of teachers' expectations, and

motivation. Motivation is also related positively and significantly with perceptions of teachers' expectations. Perception of teachers' expectations is related negatively and significantly with sex. Achievement is related positively and significantly with sex. The rest two non significant relationships were the relationship of motivation and perceptions of teachers' expectations with academic achievement of students.

This study shows that those who scored high in the academic self concept measure were found to have high academic achievement, favorable perceptions of teachers' expectations, and higher level of motivation than those who believed that they have low academic self concept.

Moreover, the finding of the study shows the relationship of motivation with academic achievement was not statistically significant. But psychologists have recognized the determinant roles of motivation in affecting learning and academic performance. Slavin (2003) stated that motivation is one of the most critical components of learning that influences academic performance in schools. In the same fashion, Dweck (2002) has argued that motivation is a key ingredient in achievement. It is also widely recognized that there is a reciprocal relationship between motivation and achievement; that is, motivation influences achievement and achievement influences motivation (Schunk, 1991, cited in Pintrich & Schunk, 2002). Furthermore, different studies revealed that academic motivation positively influenced academic achievement (Grolnick, Ryan, and Deci, 1991 cited in Redd, 2010). That means the more students are motivated to perform, the more effective their performance would be.

The critical determination of motivational factors on students' academic achievement was also reported by Sprinthall *et al.*, (1994). A positive correlation between academic motivation and academic achievement was also reported by the research result of Grolnick *et al.*, (1991) and Elliot and Dweck (1998). However, the finding of this study was in contrast with the findings of past researches. This might be due to the unreliability and invalidity of the school performance of students. That means students who are not motivated to learn may achieve high academic achievement score. It might be due to the way students were assessed through continuous assessment and the way teachers are implementing continuous assessment.

Q2- *Are there significant differences between male and female students in their perceptions of their teachers' expectations, motivation, academic self-concept and academic achievement?*

To see whether there were sex differences in perception of teachers' expectation, motivation, academic self concept and academic achievement, an independent sample t-test was conducted by taking sex of students as independent variable.

The results unveiled that there were significant mean differences in academic achievement and perceptions of teachers' expectations between male and female students. The mean scores of students in academic achievement and perceptions of teachers' expectations were different across sex groups. Male students were found to achieve higher than female students. This finding is in contrast with the finding of Jacobs (2002) cited in Zembar & Blume (2006) who found that girls do better in school than boys. Girls get higher grades and complete high school at a higher rate compared to boys.

Female students perceive their teachers' expectations to be favorable than male students. This shows that there was a perception difference among male and female students to their environment. The result is in contrast with the findings of Sadker and Sadker cited in Borich (1995) who reported that girls are more likely to be invisible members of classrooms. They receive fewer contacts, less praise, fewer complex and abstract questions and less instruction on how to do things for themselves. On the other hand Sadker and Sadker cited in Borich (1995) further said that boys were more likely to be corrected for academic mistakes and urged to practice skills until they achieved mastery. Girls were asked fewer questions and received less feedback than boys. This discrimination is estimated to bring a lower perception of teachers' expectations on the side of females.

From the findings of this study one can deduce the following implications. Teachers' expectations and the way students perceived it affect students' learning generally and their motivation, academic self concept and academic achievement specifically. Therefore, due attention should be given to this problem.

5. Conclusion

Teachers' expectations about students have no direct impact on their behavior unless the expectations are communicated to students and ultimately shape their behavior. And the way students perceive their teachers expectation determine its effect. Therefore, teachers need to become aware of the potential negative consequences of communicating low expectations, and adopt strategies that will help them raise expectations and students' performance. This implies the need to give to teachers' expectations as they affect students learning.

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