Akdeniz Language Studies Conference 2012

A study of academic achievement among Turkish ELT students

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Abstract

The present study investigated the Academic Achievement of Turkish ELT students using a sample of 400 freshman students from state universities in Ankara, Turkey. The data for the study were collected through a questionnaire consisting of 61 items measuring ELT students' self-concept, study habits and socioeconomic status in relation to their academic achievement.The results of the study indicated that there was significant association between self-concept and academic achievement among boys and girls, also positive and significant relation between study habits and academic achievement. As for socioeconomic status, there was significant relationship between socioeconomic status and academic achievement among the groups.

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Selection and peer-review under responsibility of ALSC 2012

Keywords: Academic achievement; Self-concept; Socioeconomic status; Study habits; Family income

1. Introduction

Academic Achievement is considered as one of the most important components of education since one's total potentialities and capabilities can be best judged by his/her academic achievement. Academic achievement is defined as the extent to which a learner is profiting from instruction in a given area (Nuthanap, 2007; Othman, 2011). It also denotes the knowledge and skills one has achieved and developed in the school subjects. Of course, achievement, as a multi-faceted phenomenon, is influenced by many factors such as personality, motivation, self-determination, opportunities, sound education and training (Deci& Ryan,1991). However, there are a few factors which play important roles in the academic achievement. Three of these factors that the study has focused on are: study habits, self-concept, and socioeconomic status of participants.

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Study habits can be defined as any kind of activities carried out by learners during the learning process in order to improve their learning. Students' poor study habits often result in poor academic performance. In educational settings, each individual has his/her own patterns of behavior characterized by their study habits. That's why investigating learners' study habits has gained momentum in determining their academic achievement (Singh, 1987; Nuthanap, 2007). In this study, our conceptualization of study habits is based on Patel's (1976) model of study habits.

Self-concept refers to perceptions, beliefs, feelings, attitudes and values which an individual views on describing himself (Sidhu,1987). Crain (1996) maintains that self-concept is conceived to be a multidimensional construct that becomes increasingly differentiated as individuals pass through developmental stages. In education, self-concept is considered an important construct since learners' 'affective and cognitive dimensions' put great effect on their behavior and learning (Bandura, 1997). Our conceptualization of self-concept is based on Singh and Singh (1988).Research has revealed that self-concept influences academic achievement through its effect on motivation (Schunk, 1991; Valentine, 2002). With this in mind, the present study attempts to provide answers for the following research questions:

1. Is there a relationship between self-concept and academic achievement among ELT students?
2. Do students' study habits have any role in their academic achievement?
3. Is age variable an effective factor in ELT students' academic achievement?
4. Is there a meaningful relationship between socioeconomic factors (parental employment, family income and family size) and academic achievement?

2. Methodology

A total of 400 male (M) and female (F) ELT freshman students from three state universities of Ankara/Turkey enrolled in this study. The data for the study were collected through a questionnaire consisting of 61 items measuring male and female ELT students' self-concept (22 items) and study habits (39 items), each of which uses a four-point Likert scale ranging from 'agree' (1) to 'strongly disagree' (4). The participants self-concept and study habits, as independent variables, were grouped into 3 levels of high, moderate and low according to their total scores in the questionnaire. The internal consistency reliability coefficient, determined by the Cronbach's alpha value, for all items of the questionnaire was 0.78. The data for socioeconomic status of the participants in relation to age, family income, family size and parental employment were also obtained through the same questionnaire. The participants' academic achievement, based on their GPA in the previous semester, was used as the dependent variable and it was also grouped into good, very good and excellent levels. SPSS version 19.0 for Windows used to obtain descriptive statistics in frequencies, percentages, mean scores. Chi-square Test and Crosstab Matrix was applied to find out the association between variables. Mann –Whitney U Test was used to compare the two groups on self-concept and study habits.

3. Results

The findings revealed that there was no significant relationship between participants' age and their academic achievement in both groups [Male ▶ x^2 (4,150)= 62.417,P-value = .390; p>0.05] and Female ▶ [x^2(6,250) =111.762,P-value = .060; p>0.05]. This may be attributed to the age level of the participants (mean age 20.5) which were chronologically close to each other. The significant variables in participants' academic achievement will be dealt with in the following sections.

The results, as determined by Chi-square test, for the association between males' and females' perception of self-concept were found to be significant [x^2 (2,400) =153.14;df=2; P-value=.000; P<.05]. The results of percentage analyses (see table 1) also confirmed that 60 per cent of the males and 49.6 per cent of females had high self-concept.

There was statistically significant difference between the groups in relation to their perception of study habits [x^2(2,400) =67.52; df=2; P-value=.000; P<.05]. The examination of percentage analyses (see table1) revealed that 32.7 percent of the males and 47.6 per cent of females had high study habits.

Table1.Distribution of Males and Females on Self-concept and Study Habits

	Male				Female			Chi-square		
	N	Percent			N	Percent		X^2	df	Sig.
Self-concept										
High	90	60.0		124	49.6					
Moderate	52	34.7		114	45.6		153.14	2	0.000	
Low	8	5.3		12	4.8					
Study habits	49	32.7		119	47.6					
High		71	47.3		105	42.0		67.52	2	0.000
Moderate	30	20.0		26	10.4					
Low		150	100.0		250	100.0				
Total										

The results, as determined by Mann-Whitney U-test, showed that there were statistically significant differences between Male (N= 150) and Female (N= 250) ELT students' perceptions on self-concept (U=16744.000; P-value= 0.042, P< 0.05), and study habits (U= 15298.000; P-value= 0.01, P< 0.05) because in both cases the observed P-values were less than 0.05.

Moreover, the results of Mean Rank (Mrk) and Median (Mdn) analyses (see table 2) for the groups showed that male students received higher scores both in self-concept (Male► Mrk=213.87; Mdn=43.000 and Female► Mrk=192.48; Mdn=42.000), and study habits (Male► Mrk=223.51; Mdn=94.5000 and Female► Mrk = 186.69; Mdn = 91.000). The lowest score of mean rank was ascribed to study habits (Mrk=186.69) in females group, whereas to self-concept (Mrk=192.48) in females group.

Analysis of Cohen's (1988) reliability effect test showed a slight significant difference for male and female groups in self-concept (Z= -2.035; r= 0.117, r< 0.3) and study habits (Z= -3.369; r= 0.168, r< 0.3). Cohen's (1988) reliability effect indexes for small, moderate, and strong relationships are r=0.1, 0.30, and 0.50 respectively.

Table2. Comparison of Males and Females on Self-concept and Study Habits

	Group statistics				Mann-Whitney U-Test			r
	Gender	N	MrkMdn		U	Z	Sig.	(=Z/N square root)
Self-concept	Male	150	213.87	43.0000	16744.000	-2.035	0.042	.101
	Female	250	192.48	42.0000				
Study habits	Male	150	223.51	94.5000	15298.000	-3.369	0.001	.168
	Female	250	186.69	91.0000				
Total		400						

There was a statistically significant relationship between the participants' self-concept and their academic achievement (Male ►[$x^2(4,150)$ =64.778,P-value = .008; p< 0.05] and Female► [x^2 =95.191,P-value = .003; p< 0.05]. The results of percentage analyses (see table 3)also revealed that the highest scores for excellent academic achievement were received by students with high self-concept in both groups (Male/Female ►55.30 %; 54.30) and the lowest scores by students with low self-concept (Male /Female ►7.05%; 3.32%) while average scores were observed among students with poor self-concept (Male /Female ►37.65; 42.3).

Table3. Association between Self -concept and Academic Achievement

	Academic achievement						Total	
	Excellent		Very good		Good			
Self-concept	M	F	M	F	M	F	M	F
High	47	82	19	15	24	27	90	124
%	55.30	54.30	70.38	38.46	63.16	44.08	60.0	49.6
Moderate	32	64	6	21	14	29	52	114
%	37.65	42.3	22.22	53.85	36.84	49.15	34.7	45.6
Low	6	5	2	3	0	4	8	12
%	7.05	3.32	7.40	7.69	0.0	6.77	5.3	4.8
Total	85	151	27	39	38	60	150	250
%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The findings of Chi-square test revealed that there was a statistically significant relationship between female students' study habits and their level of academic achievement (Female ► [$x^2(2,250)$ = 91.643, P-value = .030; p< 0.05] but no significant relationship was found between males and their academic achievement (Male►[x^2 =81.250,P-value = .130; p< 0.05]. Moreover, the results of percentage analyses (see table 4) showed that the highest scores for excellent academic achievement were received by female students with high (%48.3) and moderate (%56.2) study habits while the lowest scores were ascribed to female group(%12.6) with low level of study habits.

Table 4 . Association between Study habits and Academic Achievement

| Study habits | Academic achievement | | | | | | Total | |
| | Excellent | | Very good | | Good | | | |
	M	F	M	F	M	F	M	F
High	36	73	14	19	21	27	71	119
%	42.4	48.3	51.9	48.7	55.3	45.0	47.3	42.0
Moderate	31	59	8	18	10	28	49	105
%	36.5	56.2	29.6	46.2	26.3	46.7	2.7	47.6
Low	18	19	5	2	7	5	30	26
%	21.2	12.6	18.5	5.1	18.5	8.3	20	10.4
Total	85	151	27	39	38	60	150	250
%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The results, as determined by Chi-square test, showed that there were statistically significant differences between the employment of parents and students' academic achievement in males group (Male ►[$x^2(4,150) = 69.766$, P-value = .002; p< 0.05], but no significant difference was observed in females group (Female►[$x^2(6,250) = 63.631$, P-value = .350; p< 0.05].The highest scores (Male/Female►%65.88 / %75.49 ; %48.14 / %71.79 and %55.26 / %71.18 for excellent, very good and good academic achievement, respectively) were received by participants whose fathers were employed while the lowest scores were received by those whose mothers were employed (Male/Female► %8.23/%1.98; %14.81/ %5.12 ; %10.52 / % 6.77). Additionally, the analysis of the total scores revealed that participants with both father and mother employed (Male/Female►%30.0 / %22.8) had also better scores for academic achievement in all three levels in comparison to those whose mothers were employed (Male/Female►%10.0 / %3.6). See table5.

Table5. Association between Parental Employment and Academic Achievement

| Parental employment | Academic achievement | | | | | | Total | |
| | Excellent | | Very good | | Good | | | |
	M	F	M	F	M	F	M	F
Father	56	114	13	28	21	42	90	184
% 65.88 75.49	48.14	71.79	55.26	71.18	60.0	73.6		
Mother	7	3	4	2	4	4	15	9
% 8.23 1.98	14.81	5.12	10.52	6.77	10.0	3.6		
Both	22	34	10	9	13	14	45	57
%	25.88	22.51	37.03	23.07	34.21	23.72	30.0	22.8
Total	85	151	27	39	38	60	150	250
%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

There was a statistically significant relationship between family income and students' academic achievement in both groups (Male ► [$x^2(4,150)$ = 15.937, P-value = .003; p< 0.05] and Female► [$x^2(6,250)$ =10.882; P-value = .028; p< 0.05]. The results of percentage analyses (see table 6) demonstrated that 72.84 percent of females and 68.23 percent of males with high family income had excellent academic achievement while 4.70 percent of males and 11.25 percent of females with low family income had excellent academic achievement. The highest scores for academic achievement in all three levels, except for 'very good' academic achievement level among males, were received by participants with high family income and, conversely, the lowest scores were received by participants with low family income.

Table 6 . Association between Family income and Academic Achievement

		Academic achievement							Total	
		Excellent		Very good		Good				
Family income		M	F	M	F	M	F	M	F
High	58	110	10	20	21	44	89	174	% 68.23	72.84
37.03	51.28	55.26	73.33	59.3	69.6					
Moderate	23	24	11	15	16	12	50	51		
%27.05	15.89	40.47	38.46	42.10	20.0	33.3	20.4			
Low	4	17	6	4	1	4	11	25		
%	4.70	11.25	22.22	10.25	2.63	6.67	7.3	10.0		
Total	85	151	27	39	38	60	150	250		
%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

The results, as determined by Chi-square Test, revealed that there was a statistically significant relationship between family size and students' academic achievement in both groups   [Males ► $x^2(4,150)$ = 68.826,P-value = .003; p< 0.05] , and [Females ► $x^2(6,250)$ =51.743 , P-value = .006; P< 0.05]. The results of percentage analyses (see table7) also showed that students coming from small families received the highest scores for excellent academic achievement in both groups (Male / Female ► %58.89; %56.95) whereas the lowest scores were received by participants coming from large families (Male / Female ► %29.66; %1.98). Moreover, the highest scores for very good academic achievement were received by participants from medium-sized families (Male/Female ► %54.54; %51.28) whereas students from large families received no score (%0.0) for this level.

Table8. Association between Family size and Academic Achievement

| | Academic achievement | | | | | | Total | |
| | Excellent | | Very good | | Good | | | |
Family size	M	F	M	F	M	F	M	F
Small	53	86	11	19	19	30	50	51
%58.89	56.95	45.45	48.71	49.48	49.15	55.3	54.0	
Medium	28	62	16	20	16	30	60	112
%38.13	41.05	54.54	51.28	47.42	50.84	40.0	44.8	
Large	4	3	0	0	3	0	7	3
%	29.66	1.98	0.0	0.0	3.09	0.0	4.7	1.2
Total	85	151	27	39	38	60	150	250
%	100.0	100.0	100.0	100.0 100.0	100.0	100.0	100.0	100.0

4. Discussion

The findings revealed that academic achievement of male and female ELT students are influenced by a host of factors that are seemingly independent but are in fact interrelated, and that there is a positive and significant relationship between participants' self- concept and their academic achievement .The excellent level of academic achievement is highly associated with high self-concept. Although, there was no significant relationship between males study habits and their achievement, the results of percentages analysis showed that they also hada desirable level of achievement irrespective of their study habits. This means that they perceive factors other than study habits may help them to be high academic achievers.

There was a significant relationship between family income and participants' academic success.This means that parents with high family income can afford to provide all possible facilities that are needed for their children's successful while students with low family income generally lack these facilities. That's why student's high academic achievement is highly associated with family income in both groups. Results also revealed that students' academic performance is highly influenced by parents' employment. It was shown that father's employment has positive effect on academic achievement whereas mother's employment has negative effect in their children's academic achievement. This may be attributed to the fact that although the present generation has accepted their mother's working outside, in some cultureschildren are highly dependent on their parents, especially mothers. So, mothers who are employed cannot deal appropriately with their children with regard to their educational needs and this affects the ultimate academic achievements of the students.

Finally,there was statistically significant relationship between family size and academic achievement. This suggests that families with more children have difficulty providing financial and, perhaps emotional, support for their children with regard to their education and academic achievement and that the present day children are more comfortable with the small family (Nuthanap, 2007).

5. Conclusion

Results of this study underlined the importance of key factors in evaluating academic achievement among Turkish ELT students. All of the variables examined in the study were found to be important factors that may help distinguish students with academic achievement. That is, students with lower sense

of self-concept and personality development, have poor study habits and lower levels of socioeconomic status will have difficulty in coping with the learning and educational problems and will have a lower academic achievement. Additional results in relation to parental employment, family size and family income also revealed some important findings that could be considered while preparing academic curricula and may help to enhance classroom teaching in ELT programs.

   The findings also demonstrated that identifying the effect of various factors on students' academic achievement is of great importance to educators, curriculum planners and parents. Therefore, focusing efforts to understand these factors further would be helpful for students in enhancing their academic achievement. It is believed that if self –concept can be ascertained in determining successful education, then efficient counselling services, educational efforts and programs, teacher practices should be aimed at enhancing students' self-concept. To improve students' study habits, they should be involved in creative work and various mental problem solving exercises encouraging a spirit of competition.Moreover, optimizing student learning, and hence academic achievement, is also believed to involve positive influences that are generated by or obtained from socioeconomic variables such as family income, parental employment and family size which are outside of students themselves and could also assist students in achieving academic achievement.

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