

## An Evaluation on Study Skills of High School Students

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**Abstract:** The main purpose of this study is to analyze study skills of high school students from the aspects of gender, school type, grade and educational field variables as well as efficiency level. Study was conducted with the participation of 496 students studying at eight high school in the city center of Erzurum Province of Turkey within 2008-2009 educational year. Research data was obtained through “Study Skills Scale” that was developed by Telman [20]. Statistical analysis of independent group t-test, one way ANOVA, frequency and percentage were applied. According to the data obtained, there was found no significant difference between study skill scores students regarding gender; whereas, a significant difference was found regarding grade, school type and field of education. In addition, study skills of high school students were found inefficient in general and need to be reviewed.

**Key words:** Study skills • High school • Students • Efficiency level • School type • Field of education

### INTRODUCTION

It is of great importance for students to recognize the use of productive study and learning ways in school life achievement. Nowadays, it has become an important issue which should be accentuated fastidiously to get students adapt study habits.

Christenson and Anderson [1] emphasized the importance of a person's improving himself sophisticatedly and acquiring a profession because of which adapting effective study skills plays important role [1]. Türkoğlu [2], on the other hand, signifies its becoming almost a requirement for a student to graduate from his school with remarkable achievement because of the importance attributed to acquire a profession [2].

Study skills are mostly discussed under topics of planning the time (spending time efficiently), organizing space for study, efficient reading, active listening, note taking, effective writing, active learning, doing homework's, preparing to exams and taking exams [3-10].

It becomes almost essential to adapt habits of life-long and self-managed learning in today's consistently changing world where knowledge keeps on advancing. Admitting self-study skills being on important factor of learning process, students' competences on studying

habits (skills) come into prominence. It is also believed that getting those habits will definitely affect achievement in school and post-school life [4,10-12]. Yıldırım, Doğanay and Türkoğlu (2000) indicate that students who cannot develop appropriate study and learning methods will be inefficient in terms of motivation for learning, planning learning processes and overall evaluation of them [10]. It is also emphasized that this inefficiency will affect students' achievements in schools and post-school life negatively. Yeşilyaprak (2000) points out that some students may fail to succeed despite sparing enough time for the study. She also indicates the main reason for this is their failing to acquire effective study skills [13].

Crotta [14] attained the result that students' developing study skills diminished almost all of the behavioral problems after all, as he adapted the study skills programme to the 7 th and 8 th grade students just before they went to secondary school succeeding in primary was conducted [14].

It is also denoted that students who gain appropriate study skills in school develop positive attitudes towards school and adopt learning as a goal [12]. Uluğ [15] points out that the success achieved after productive studying will be reassuring and encouraging for the individual in addition to change studying into an enjoyable activity for him [15].

It was perceived as parents' responsibility for students to acquire study skills in traditional educational conception. Today, however, it is being conceived that it has become teachers' responsibility as well [16,17]. Dembo [18] indicates that one of the fundamental objectives of educational psychology is to make teachers good instructors and good learners [18]. According to Dembo [18] and Thomas [4], teachers who recognize their learning processes will get their students adopt study skills easier and the students who acquire study skills will be more advantageous from the aspects of succeeding in school and developing self-inspection habits [4,17].

Gettlinger and Seibert [19] state that despite recognizing the importance of study skills for students' achievements in schools and in life, most of the teachers don't know exactly what effective study skills are [19]. They also emphasize the importance of teachers' getting students to adopt study skills. Crotta [14], on the other hand, signifies the risk primary school students who cannot acquire efficient study skills are under and also signifies the importance of eliminating this inefficiency [14].

**Purpose of the Study:** The main purpose of this study is to analyze study skills of high school students from the aspects of gender, school type, grade and educational field variables as well as efficiency level.

## MATERIALS AND METHODS

**Research Model:** This is a descriptive study in review model.

**Population and Sampling:** Study was conducted with the participation of 496 students, 254 of which are female and 242 were male, studying at eight high schools in the city center of Erzurum Province of Turkey within 2008-2009 educational year.

**The Instrument:** Research data was obtained through "Study Skills Scale" that was developed by Telman [20]. It has 20 items with a score range of 0-100. Scores between 0-49 demonstrates inefficiency, 50-74 demonstrates study skills' requiring a review and 75-100 demonstrates efficiency of study skills.

**Data Analysis:** SPSS 16.0 packaged software was used for statistical analysis of data obtained. Independent group t-test, one way ANOVA and frequency and percentage.

## Findings and Interpretations

**Findings and Interpretations Regarding Study-Skill Scores of High-School Students in Accordance with Their Gender:** t value, average and standard deviation values of study skill scores of participating high school students in accordance with gender are given in Table 1 below:

There was found no significant difference between study skill scores of male and female students ( $t_{94} = 0.227$ ;  $p = .821$ ). Leveling gender roles has prevailed in Turkey, as in the other parts of the world in the verge of 21<sup>st</sup> century. It can be assumed that most people have recognized the importance of acquiring a profession regardless of gender discrimination and there has been established a common sense on gaining study skills within. Shortly, it can be asserted that disappearance of positive discrimination on gender has played a great part in this. Considering the issue from another aspect, the highest score of ideal study skills is 100. Study skill levels of both male and female students are medium. This result can be conceived as both groups' having certain shortcomings pertaining to study skill competences which should be reviewed. Crotta [14], on the other hand, signifies the risk primary school students who cannot gain efficient study skills are under alongside eliminating this inefficiency [14].

**Findings and Interpretations Regarding Study Skills Scores of High School Students in Accordance with Their Grades:** Average and standard deviation of study skill scores of high school students in accordance with their grades are given in Table 2 below.

Lise öğrencilerinin grade düzeylerine göre çalışma davranışları puanlarına ilişkin aralarında farklılık gösterip göstermediklerini saptamak amacı ile varyans analizi yapılmış olup, bulgular Tablo 2'de verilmiştir.

The findings of one way variance analysis (ANOVA) in order to determine significance of the difference study skill scores regarding their grades are given in Table 3 below:

There was found a significant difference between study skill scores of high school students according to their grades ( $F = 17.456$ ,  $p = .000$ ). LSD test was applied to determine which group was this difference caused by. According to the result of this test, the difference was found between 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> grade students on behalf of 9<sup>th</sup> grade ones. This finding can be interpreted as 9<sup>th</sup> grade high school students' attaching more importance to study skills than higher grade students and their making valid rules as a life style compared to other grades.

Table 1: t Value, Average And Standard Deviation Values of Study Skill Scores of High School Students In Accordance With Gender

Gender	n	$\bar{x}$	sd	t	p
Female	254	53.72	14.41	0.227	0.821
Male	242	53.40	16.12		

sd:494 p&gt;0.05

Table 2: Standard Deviation And Mean Values of Study Skill Scores of High School Student In Accordance With Their Grades

Grades	n	$\bar{x}$	sd
9 <sup>th</sup> Grade	177	59.57	14.29
10 <sup>th</sup> Grade	120	51.12	14.48
11 <sup>th</sup> Grade	111	47.70	14.47
12 <sup>th</sup> Grade	88	52.21	15.23
Total	496	53.56	15.25

Table 3: Variance analysis to determine significance of the difference between study skill scores of high school students in accordance with their grades

Grades	Sum of Squares	sd	Mean of Squares	F	p
Inter-groups	11085.237	3	3695.079	17.456	0.000
In-groups	104148.432	492	211.684		
Total	115233.669	495			

Table 4: Standard Deviation And Mean Values of Study Skill Scores of High School Student Regarding School Type

School Type	n	$\bar{x}$	sd
Regular High School	151	58.31	16.84
Social Sciences High School	93	52.58	11.96
Girls High School	102	53.77	13.19
Science High School	150	49.26	15.47
Total	496	53.56	15.25

Table 5: One Way Variance Analysis (ANOVA) To Determine Significance of The Difference Study Skill Scores Regarding The School Type

School Types	Sum of Squares	sd	Mean of Squares	F	p
Inter-groups	6267.506	3	2089.169	9.433	0.000
In-groups	108966.163	492	221.476		
Total	115233.669	495			

Yıldırım, Doğanay and Türkoğlu [10] indicates that students who cannot develop appropriate study and learning methods will be inefficient in terms of motivation for learning, planning the learning processes and evaluation of them which will affect their achievements in schools and post-school life negatively [10]. Considering

this result it can be interpreted that the 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> grade students are more likely to confront success and motivation issues compared to the 9<sup>th</sup> grade.

**Findings and Interpretations Regarding Study Skills Scores of High School Students in Accordance with the School Type:** Standard deviation and mean value of study skill scores of high school students regarding school type are given in Table 4 below:

The findings of one way variance analysis (ANOVA) in order to determine significance of the difference study skill scores regarding the school type are given in Table 5 below:

There was found a significant difference between study skill scores of high school students according to school type ( $F= 9,433$ ,  $p=.000$ ). LSD test was applied to determine which group was this difference caused by. According to the results obtained, there was found a significant difference between study skill scores of regular high school students, social sciences high school students, girls high school and science high school students, in favour of regular high schools.

This finding can be interpreted as regular high school students' being self-motivated to study harder to get into university than the students of other high school who have been chosen necessitates them to develop efficient study skills. Today, however, it is widely admitted that beside parents' efforts it has become teachers' responsibility as well to have students gain effective study skills [16,17]. In this case, teachers of social science high school, girls high school and science high school regard having students gained efficient study skills as one of their missions of first priority.

**Findings and Interpretations Regarding Study Skills Scores of High School Students in Accordance with the Educational Field:** Standard deviation and mean value of study skill scores of high school students regarding educational field are given in table 6 below:

The findings of one way variance analysis (ANOVA) in order to determine significance of the difference study skill scores regarding the educational field are given in Table 7 below:

There was found a significant difference between study skill scores of high school students according to field of education ( $F= 14,809$ ,  $p=.000$ ). LSD test was applied to determine which group was this difference caused by. Considering this result, there is significant difference between study skill scores of students whose educational fields are determined and whose are not, on

Table 6: Standard Deviation And Mean Values of Study Skill Scores of High School Students Regarding Educational Field

Fields of Education	n	$\bar{x}$	sd
Verbal	46	53.2609	14.61420
Numerical	223	50.9641	15.47560
Equal weight	94	49.8404	13.68721
Nondetermined (ninth grade)	133	60.6767	13.89601
Total	496	53.5685	15.25763

Table 7: One Way Variance Analysis (ANOVA) In Order To Determine Significance of The Difference Study Skill Scores Regarding The Educational Field

Educational Field	Sum of Squares	sd	Mean of Squares	F	p
Inter-groups	9543.383	3	3181.128	14.809	0.000
In-groups	105690.287	492	214.818		
Total	115233.669	495			

Table 8: Frequency, Percentage, Average And Standard Deviation Values of Study Skills Efficiency Level Scores of High School Students

Efficiency Level	f	%	$\bar{x}$	sd
Efficient (75-100 points)	52	10.5	78.8462	5.10818
Moderate (50-74 points)	281	56.7	58.8790	6.64720
Inefficient (0-49 points)	163	32.9	36.3497	8.62564
Total	496	100.0	53.5685	15.25763

behalf of the ones whose educational fields are not determined (9<sup>th</sup> grade) yet. This case indicates that efficiency level of study skills of students whose educational fields are not determined is higher than the others. This finding can be explained through students with undetermined educational fields gaining more disciplined study skill (behaviors) in the uncertain period of pro-determination. Furthermore, it can also be stated as students with determined educational fields gaining flexible studying habit through getting over the uncertain period.

Uluğ [15], Türkcan and Öcal [12] denotes that students who gain appropriate study skills in school develop positive attitudes towards school and adopt learning as a goal [12,15]. It is also pointed out that the success achieved after productive studying will be reassuring and encouraging for the individual in addition to change studying into an enjoyable activity for him. Considering the issue in the light of above given information, it can be stated that self-confidence and encouragement level of students whose educational fields are not determined are likely to be higher than the students of certain educational fields.

Yıldırım, Doğanay and Türkoğlu [10] indicates that students who cannot develop appropriate study and learning methods will be inefficient in terms of motivation for learning, planning learning processes and evaluation of them [10]. Considering this result, it can be affirmed that students whose educational fields are determined are likely to confront motivation and learning difficulty issues.

**Findings and Interpretations Regarding Study Skills Efficiency Level Scores of High School Students:** Frequency, percentage, average and standard deviation values of study skills efficiency level scores of participating high school students are given in Table 8 below.

As is seen in table 8 above, study skills of only 52 out of 496 (10,5%) participant high school students were found efficient. Study skill efficiency level of 281 students (56,7%) was observed as medium, in other words, as in need of review. Remaining 163 students (32,9%) were observed to have poor study skill efficiency level. Considering those results, it can be stated that study skill efficiency level of only 10,5% of all the participant students as found high enough. Students with medium study skill efficiency level comprises the biggest group in number (56.7%). It is suggested in the regulation of “Study Skills Assessment Scale ” that study skills of this group be reviewed. All these findings have revealed that high school students consisting the sample of this study confronts serious problems in terms of study skills and all the interested people (teachers, principle etc.) in those schools need to take any necessary precaution steps.

Admitting self-study skills being on important factor of learning process, students’ competences on studying habits (skills) come into prominence. It is also believed that getting those habits will definitely affect achievement in school and post-school life [4,10-12]. Yıldırım, Doğanay and Türkoğlu [10] indicates that students who cannot develop appropriate study and learning methods will be inefficient in terms of motivation for learning, planning learning processes and evaluation of them [10]. In the light of the findings obtained from this study that students’ having problems with study skills will affect their school life and afterwards success. They will most probably have problems with motivation for learning, planning learning processes and evaluation as well.

## CONCLUSION

According to the data obtained, there was found no significant difference between study skill scores students

regarding gender; whereas, a significant difference was found regarding grade, school type and field of education. In addition, study skills of high school students were found inefficient in general and need to be reviewed. These results demonstrates that there are important problems in high school students in terms of developing effective study skills. Again, in the light of the findings obtained from the study, it is recommended that teachers, students, school managers and parents get seminars or conferences on productive study methods, time management and study skills.

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