# The Frequency and Differences of Students about Recreational Activity Participation Based On Demographical Characteristics and Academic Success Level: City of Tokat Example

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## Abstract

*In the present study, the objective is to analyse the frequency and differences of students about recreational activity participation based on demographical characteristics and academic success level. The sample group of the study consists of 409 final-grade students randomly selected from 5 different vocational high schools in the city centre and other districts of Tokat. In the first part of the study, information was collected on socio-demographical characteristics of high school students attending different types of schools. In the second part, students were asked to provide average grades achieved for 4 classes (Mathematics, Literature, English, and History) in the 9th, 10th, 11th and 12th grades in order to establish the range for academic success score. In the third part, an attempt was made to measure the opinions of the students about the sufficiency of the opportunities provided by the school they attend, by using a likert type measuring method with 4 questions. The answers given by students to the questions in the scale as representative of their opinions were used to calculate the score of sufficiency was calculated for the relevant opinion of each student such that the minimum score is 4 and the maximum score is 20. The convergence of the relevant score to 4 means that the relevant student finds opportunities offered by his/her school insufficient and convergence to 20 means opportunities offered by the relevant school are sufficient. The fourth part of the study focuses on the frequency and differences of students about participation to recreational activities.*

**Keywords:** Recreation, Vocational Schools, Academic Success

## *1. Introduction*

At present time, recreation is attributed several meanings and used frequently in reference to various activities. There are many definitions which are provided from different perspectives. Recreation is defined as basic and modern needs of people and encompasses the entirety of activities, trainings, opportunities and consultancy services adding value to the spare times. In an another definition, recreation is explained as events and activities performed to rest, have fun, kill time or for pleasure or spiritual and physical relaxation and renewal achieved by engaging in such activities.

Yet, another definition provides that recreation is about participating in a relaxing, entertaining and renewal activity improving the knowledge and skills upon fulfillment of the personal occupational, familial and social responsibilities. (Karakucuk, 2008). Miller and Rabinson suggest that recreational activities are performed by displaying entertaining and meaningful free, happy and natural behaviours. The Recreation Program, Athletic Institute described as voluntarily performed activities acting as a source of personal satisfaction for people. According to Romney, recreation is about emotions rather than behaviours.

It is about personal reactions, spiritual reactions, behaviours and the life style. (Sahin, 2003). Recreation is the voluntary participation of members or groups within the society to any spare time activity leading to well-being and skill development (Young, M., Potgieter, N., Madiba, K. 2004). Individuals tend to regulate, protect their physical and mental health and maintain this positive state against intensive work load, routine life style and adverse external factors. The need for recreational activities takes root from the individual and social benefits provided by recreational activities. In consideration of the motives giving rise to the requirement of recreational activities; improvement of physical health, achievement of mental health, socializing, creativity, improvement of personal talents and skills, benefits on professional career and efficiency, economic dynamism and happiness are personal motives and supporting social solidarity and integration, creation of a democratic society are the social motives (Karakucuk, 2001) The term recreation that is widely used in various spheres of the social life in Turkey since 1980s means "participation of an individual in a cultural, sports, arts, activities for the purpose of entertainment, resting, and personal and individual development in spare times other than the time spared for studying other activities" (Cetinbas, 2010).

The terms recreation and spare time are closely related by everyone from any age group, culture, social segment, gender and lifestyle (O'Sullivan, 2006: 5). At present time, people spend one fourth of their lifetime by performing recreational activities. Recreation encompasses healthy and the handicapped individuals of all age groups and skill levels participating in free-time activities and receives great interest in countries with high level of education based on the tendency of individuals about living healthy. Therefore, foreign countries have significant number of undergraduate and postgraduate programs on recreation and universities implement study programs and conduct studies on reactions for a long time. In general, well-being, spots, free-time activities, psychology, sociology and recreational activities are the main factors laying the foundations of the programs in the educational institutions. Efficient use of free time serves towards personal and social development in contrary to the inefficient use resulting with problems such as depression, low performance and unhappiness (Balci, 2003).

In the United States of America, the use of free-time for free and recreational activities increased in the beginning of the 20th century (McLean et al.,2008: 66) It is apparent that departments on recreation work in an inter-disciplinary and multi-disciplinary manner. Particularly, the desire of individuals about healthy living guides them towards recreational activities providing physical and mental relaxation. Therefore, it is observed that scientific studies conducted about recreation around the world focus on wide-range of fields such as recreational therapy, sportive recreation (indoor and outdoor recreation-wellness, fitness), commercial and non-commercial recreation (recreational enterprises and non-profit recreational areas for public use), health tourism and medical tourism (hot spring, cures, massage and hydrotherapy) indicating increased interest in these fields. In the recent decade, recreational activities in Turkey have been performed as Recreation and Sports and subsequently become subject to educational and research activities in the least.

In fact, schools that are like a rehearsal of the real life prepares children to a play that will be staged for a lifetime. Although the primary objective of schools appears to be education, educational contribution provided by education professional and activities encompasses the first steps taken towards becoming a positive individual. Rehearsals providing contribution towards different aspects of this play on life are defined with activities performed at school. Socialization process of a child starts when he/she realizes the presence of other people, however the actual process starts when a child communicates and shares things with his/her peers. Social activities children carry out collectively in the first days of the school serve towards their personal development in showing presence as an individual within a group of people. Children can show their potential through activities such as drama, theatre, ceramics, etc. focused on artistic creativity. This type of activities performed at early ages improves the creativity, productivity, and alternative generating, flexibility and practicality skills of an individual. At present day, recreational activities started to function as an efficient education tool aimed at solving social problems by expanding the field of interest in order to meet various expectations of individuals such as physical education, sports, etc. A recreational activity provides different contribution in different stages of a child's life independent from the specific subject (drama, theatre, sports, club activities, etc.) (Kose, 2013).

- Supports sharing within a group;
- Provides positive contribution towards self-perception of a child.
- Allows a child to have an idea about self-potential.
- Supports skills such as showing presence as an individual, decision-making, planning, etc.

- Allows a child to confirm information on self-identity in sub-cultures created during the activities, as the age increases.

In a child's development, non-class recreational activities are as important as activities performed in the class. This type of activities consolidates the learning outcomes of students' formal education process, shows the correlation of these learning outcomes with real-life experiences and allows implementation of theoretical knowledge. Non-class activities should not be considered as activities separate and independent from the formal education process. To this extent, the most important requirement is the performance of non-class activities in a controlled, programmed and planned manner. In our era, children can easily adopt adverse behaviours when non-class, free-time activities of them is not controlled by teachers or adults. Non-class activities represent one of the most logical ways allowing children to spend quality time in a controlled manner out of the classes at school. (Kose, 2013). Education professionals responsible for planning and management processes can achieve success with full awareness on characteristics and preferences of users rather than utilizing their own personal preferences and professional knowledge. Particularly, recreational areas must be created in educational institutions and persons responsible for the management must be provided with the relevant information.

Recreational activities are driving forces in revealing and improving the creative and innovative power of individuals at any stage of their lifetime. Creativity and innovation are skills that are present with every individual at a certain level. Happiness of people is one of the main objectives of the recreation. Free-time activities are performed voluntarily in a time frame of personal choice. This time frame represents the time selected by individuals for activities to be performed or desired to be be performed based on their free will. Naturally, such activities provide personal satisfaction, happiness and allow personal rewarding. In the present time, a happy, healthy and modern individual is considered as a person providing positive contribution to his/her immediate surroundings. Such an individual participates in recreational activities, adds color to the daily routine life and enhances his/her life through dynamism. Thus our students get opportunity to become good and happy individuals attaching importance to local and regional concerns and use this positive energy to the best interests of our country. Recreational activities ties individuals to life by providing opportunity to rest, have fun and keeping individuals engaged. Moreover, such activities add values such as keeping away from bad habits such as smoking, alcohol, adopting an ever-active life style and living in harmony with the other members of the family and society. Such habits starting in the family are improved further during the school.

Therefore, individuals, families, education professionals and administrators must have increased awareness on efficient use of free-time and recreation leaders must increase the fields of application in order to appeal to larger masses. Students tend to adopt bad habits and their level of success is reduced due to limited number of recreational classes and intensive study load, training studies of students attending Vocational and Technical Education Schools. In our country, an effective recreation plan must be developed for our students attending to vocational schools and this plan must be studied and implemented. Recreation is one of the social spheres such as family, education, religion, law and economy and it is universal, compulsory and important. This sphere that is as important as resting, entertainment and pleasure in human life usually consists of information, art and hobby activities. It appears as a cultural activity due to its sub-fields such as resting, sleeping, entertainment, games, sports, pleasure, information and artistic activities. The goal of contemporary education is to give individual-oriented education rather than creating prototypes. Recreational activities must be performed in a form allowing an individual to improve core skills such as arts, handicrafts and sports in the course of school life and such activities would improve the level of academic success only when implemented by encouraged, motivated and educated administrators and education professionals.

## *2. Methodology and Theoretical Framework*

Opinions of experts were asked and the literature was revived for the purpose of establishing the study framework which was finalized upon determining subject of the study. Studies conducted previously and recommendations provided in the recent studies for the future were reviewed attentively in the course of the literature review. Subsequently, a target group was selected and methods were identified to reach to the study group. City of Tokat was selected as the study area as it made a distinguished name with numerous national and international achievements in connection with the project-based vocational education and the idea that it would contribute towards the development of recreational activities in vocational education and potential for the extension to other education institution were the decisive factors.

The present study aimed at analysing the frequency of participation and awareness on recreational activities based on demographical characteristics and the level of academic success of students focused on recreational activities affecting the success performance of individuals in their education career. In the present study, an attempt was made to evaluate the non-class recreational areas as well as the potential of recreational activities performed by students in the school environment towards affecting their level of success based on their opinions. The foregoing are the main motives behind conducting this study and a contribution is made for the literature resources.

## *3. Data Collection Tool and Findings*

Frequency distributions in connection with the socio-economic questions asked in the first part of the survey were used to collect information about the student included in the scope of the present study. The following parts studied the correlation between the grades of students in each class and their demographical characteristics. Crosstabs and chi-square analysis were used to study the correlation between demographic characteristics and the level of academic success. Cramer V values were given place in the tables as correlation coefficient. Multivariate analysis of variance was used to study the difference between the level of academic success and the frequency of participation in recreational activities by students.

A new variable was created with the scores calculated based on the answers given to the survey of sufficiency in part three and tests of normality were applied for this new variable. Skewness and kurtosis values of the data set were studied for the purpose of the test of normality. Extreme values were deleted as they were not within the range of +1.5 and -1.5 skewness and kurtosis values. As the skewness and kurtosis values calculated for the sufficiency of opportunities are within the range of ±1.5, it was assumed that the distribution of the studied variables is normal (Tabachnick and Fidell, 2013**). One way test of variance (One-Way ANOVA) was applied to analyse the differences between the opinions of students about the sufficiency of opportunities provided at school and the academic success grades of students. The significance level was assumed as α=.05 in the statistical tests applied and hypothesis were tested at reliability level of α=95%. SPPS 21 for Windows software package as used for the purpose of the statistical analysis within the scope of the study.

** Tabachnick and Fidell, 2013 B.G. Tabachnick, L.S. Fidell Using Multivariate Statistics (sixth ed.)Pearson, Boston (2013)

**Table 1: Validity and Reliability**

| Scale | Item Number | Alpha Coefficient |
|---|---|---|
| Scale on the Sufficiency of Opportunities Offered by Schools | 4 | ,859 |
| Recreational Activity Scale | 43 | ,916 |

Table 1 shows the results of cronbach's alpha coefficient method applied in connection with the validity and reliability of the scales used in the study. Accordingly, alpha coefficient for the sufficiency scale of the opportunities provided by the schools included in the study and recreational activity scale were found .859 and .916, respectively. The results obtained show that the scales used measure with high level of reliability.

**Table 2: Frequency Distribution on Demographical Characteristics of the Students Participated in the Study**

| VARIABLES | SUB-CATEGORIES | N | % | TOTAL |
|---|---|---|---|---|
| **Gender** | Female | 175 | 42.8 | 409 |
| | Male | 234 | 57.2 | |
| **School Type** | Industrial and Vocational School | 182 | 44.5 | 409 |
| | Vocational School for Girls | 105 | 25.7 | |
| | Vocational School for Healthcare | 50 | 12.2 | |
| | Trade Vocational School | 45 | 11.0 | |
| | Imam Hatip | 27 | 6.6 | |
| **Income Level of the Household** | 1500 and less | 271 | 66.3 | 409 |
| | 1501 and above | 138 | 33.7 | |
| **Weekly Pocket Money** | 50 and less | 322 | 78.7 | 409 |
| | 51 and above | 87 | 21.3 | |
| **Time Spared for Social Activities** | 1 Hour | 180 | 44.0 | 409 |
| | 2 hours and more | 229 | 56.0 | |
| **Daily Time Spared for Studying** | 1 hour | 221 | 54.0 | 409 |
| | 2 hours | 117 | 28.6 | |
| | 3 hours and more | 71 | 17.4 | |

Table 2 shows that a total of 409 students were included in the study, consisting of 42. % female and 57.2% male participants. 44.5% of the students attend Industrial Vocational School, 25.7% attend Vocational School for Girls, 12.2% attend Vocational School for Healthcare, 11% attend Trade Vocational School and 6.6% attend Imam Hatip School. In consideration of the income level of the students' families, the income level is 1500 TL and less for 66.3% and 1501 TL and more for 33.7%. 78.7% of the students receive 50TL as weekly pocket money while the remaining 21.3% receive 51 TL and more. 44% of the students spare 1 hour for social activities while the remaining 56% spare 2 hours and more. 54% of the students spare 1 hour for studying at home and 28.6% spare 2 hours while the remaining 17.4% spare 3 hours.

**Table 3: Correlation between the Genders and Academic Success of the Students Included in the Study**

| | | **MATHEMATICS** | | | | |
|---|---|---|---|---|---|---|
| | | **0-49** | **50-59** | **60-69** | **70-84** | **85-100** |
| GENDER | MALE | 13 | 48 | 48 | 42 | 24 |
| | FEMALE | 17 | 58 | 69 | 65 | 25 |
| | TOTAL | 30 | 106 | 117 | 107 | 49 |
| Chi-square | | df | | Cramer V | | p |
| 1.735 | | 4 | | ,065 | | ,784 |
| | | **LITERATURE** | | | | |
| | | **59-** | | **60-69** | **70-84** | **85-100** |
| GENDER | MALE | 27 | | 39 | 58 | 51 |
| | FEMALE | 39 | | 71 | 89 | 35 |
| | TOTAL | 66 | | 110 | 147 | 86 |
| Chi-square | | df | | Cramer V | | p |
| 12.760 | | 3 | | ,177 | | ,005* |
| | | **ENGLISH** | | | | |
| | | **0-49** | **50-59** | **60-69** | **70-84** | **85-100** |
| GENDER | MALE | 2 | 32 | 36 | 58 | 47 |
| | FEMALE | 15 | 44 | 66 | 70 | 39 |
| | TOTAL | 17 | 76 | 102 | 128 | 86 |
| Chi-square | | df. | | Cramer V | | p |
| 14.316 | | 4 | | ,187 | | ,006* |
| | | **DATE** | | | | |
| | | **59-** | | **60-69** | **70-84** | **85-100** |
| GENDER | MALE | 42 | | 36 | 60 | 37 |
| | FEMALE | 41 | | 48 | 66 | 79 |
| | TOTAL | 83 | | 84 | 126 | 116 |
| Chi-square | | df | | Cramer V | | p |
| 8.893 | | 3 | | ,147 | | ,031* |

*p<α=.05

Table 3 shows the crosstab and chi-square analysis applied to determine the correlation between the genders and academic success of the students included in the study. Accordingly; there is a significant statistical correlation between the genders of the students included in the study and their level of success in literature, English and history classes, on the other hand, there is no significant statistical correlation between the gender variable and level of success in mathematics classes.

**Table 4: Correlation between the Type of School and Academic Success of the Students Included in the Study**

| | | **MATHEMATICS** | | | | |
|---|---|---|---|---|---|---|
| | | **0-49** | **50-59** | **60-69** | **70-84** | **85-100** |
| SCHOOL TYPE | INDUSTRIAL VOCATIONAL SCHOOL | 11 | 45 | 55 | 54 | 17 |
| | VOCATIONAL SCHOOL FOR GIRLS | 12 | 28 | 30 | 19 | 16 |
| | VOCATIONAL SCHOOL FOR HEALTHCARE | 2 | 17 | 8 | 17 | 6 |
| | TRADE VOCATIONAL SCHOOL | 2 | 9 | 13 | 13 | 8 |
| | IMAM HATIP | 3 | 7 | 11 | 4 | 2 |
| | TOTAL | 30 | 106 | 117 | 107 | 49 |
| **Chi-square** | | **df** | | **Cramer V** | | **p** |
| 20.755 | | 16 | | ,225 | | ,188 |
| | | **LITERATURE** | | | | |
| | | **59-** | | **60-69** | **70-84** | **85-100** |
| SCHOOL TYPE | INDUSTRIAL VOCATIONAL SCHOOL | 29 | | 58 | 69 | 26 |
| | VOCATIONAL SCHOOL FOR GIRLS | 22 | | 24 | 33 | 26 |
| | VOCATIONAL SCHOOL FOR HEALTHCARE | 1 | | 6 | 19 | 24 |
| | TRADE VOCATIONAL SCHOOL | 10 | | 17 | 13 | 5 |
| | IMAM HATIP | 4 | | 5 | 13 | 5 |
| | TOTAL | 66 | | 110 | 147 | 86 |
| **Chi-square** | | **df** | | **Cramer V** | | **p** |
| 44.597 | | 12 | | ,330 | | ,000* |
| | | **ENGLISH** | | | | |
| | | **0-49** | **50-59** | **60-69** | **70-84** | **85-100** |
| SCHOOL TYPE | INDUSTRIAL VOCATIONAL SCHOOL | 14 | 33 | 55 | 52 | 28 |
| | VOCATIONAL SCHOOL FOR GIRLS | 2 | 19 | 24 | 32 | 28 |
| | VOCATIONAL SCHOOL FOR HEALTHCARE | 1 | 8 | 6 | 20 | 15 |
| | TRADE VOCATIONAL SCHOOL | 0 | 13 | 13 | 15 | 4 |
| | IMAM HATIP | 0 | 3 | 4 | 9 | 11 |
| | TOTAL | 17 | 76 | 102 | 128 | 86 |
| **Chi-square** | | **df** | | **Cramer V** | | **p** |
| 37.031 | | 16 | | ,301 | | ,002* |
| | | **DATE** | | | | |
| | | **50-59** | | **60-69** | **70-84** | **85-100** |
| SCHOOL TYPE | INDUSTRIAL VOCATIONAL SCHOOL | 30 | | 43 | 46 | 63 |
| | VOCATIONAL SCHOOL FOR GIRLS | 35 | | 22 | 32 | 16 |
| | VOCATIONAL SCHOOL FOR HEALTHCARE | 5 | | 3 | 21 | 21 |
| | TRADE VOCATIONAL SCHOOL | 8 | | 11 | 18 | 8 |
| | IMAM HATIP | 5 | | 5 | 9 | 8 |
| | TOTAL | 83 | | 84 | 126 | 116 |
| **Chi-square** | | **df** | | **Cramer V** | | **p** |
| 38.373 | | 12 | | ,306 | | ,000* |

*p<α=.05

Table 4 shows the crosstab and chi-square analysis applied to determine the correlation between the type of schools and academic success of the students included in the study. Accordingly; there is a significant statistical correlation between the type of schools attended by the students included in the study and their level of success in literature, English and history classes, on the other hand, there is no significant statistical correlation between the type of school variable and level of success in mathematics classes.

**Table 5: Correlation between the Time Spared for Social Activities and Academic Success of the Students Included in the Study**

| | | **MATHEMATICS** | | | | |
|---|---|---|---|---|---|---|
| | | **0-49** | **50-59** | **60-69** | **70-84** | **85-100** |
| TIME SPARED FOR SOCIAL ACTIVITY | 1 HOUR | 13 | 50 | 55 | 40 | 22 |
| | 2 Hours And More | 17 | 56 | 62 | 67 | 27 |
| | TOTAL | 30 | 106 | 117 | 107 | 49 |
| **Chi-square** | | **df** | | **Cramer V** | | **p** |
| 2.785 | | 4 | | ,083 | | ,594 |
| | | **LITERATURE** | | | | |
| | | **59-** | | **60-69** | **70-84** | **85-100** |
| TIME SPARED FOR SOCIAL ACTIVITY | 1 HOUR | 36 | | 55 | 49 | 40 |
| | 2 Hours And More | 30 | | 55 | 98 | 46 |
| | TOTAL | 66 | | 110 | 147 | 86 |
| **Chi-square** | | **df** | | **Cramer V** | | **p** |
| 11.593 | | 3 | | ,168 | | ,009* |
| | | **ENGLISH** | | | | |
| | | **0-49** | **50-59** | **60-69** | **70-84** | **85-100** |
| TIME SPARED FOR SOCIAL ACTIVITY | 1 HOUR | 6 | 30 | 46 | 64 | 34 |
| | 2 Hours And More | 11 | 46 | 56 | 64 | 52 |
| | TOTAL | 17 | 76 | 102 | 128 | 86 |
| **Chi-square** | | **df** | | **Cramer V** | | **p** |
| 3.771 | | 4 | | ,096 | | ,438 |
| | | **DATE** | | | | |
| | | **50-59** | | **60-69** | **70-84** | **85-100** |
| TIME SPARED FOR SOCIAL ACTIVITY | 1 HOUR | 38 | | 47 | 52 | 43 |
| | 2 Hours And More | 45 | | 37 | 74 | 73 |
| | TOTAL | 83 | | 84 | 126 | 116 |
| **Chi-square** | | **df** | | **Cramer V** | | **p** |
| 7.620 | | 3 | | ,136 | | ,055 |

*$p<\alpha=.05$

Table 5 shows the crosstab and chi-square analysis applied to determine the correlation between the time spared for social activities and academic success of the students included in the study. Accordingly; there is a significant statistical correlation between the amount of time spared for the activity by the students included in the study and their level of success in literature classes, on the other hand, there is no significant statistical correlation between time spared and level of success in mathematics, English and history classes.

**Table 6: The Frequency of Participation in Social Activities by Students Included in the Study**

| RECREATIONAL ACTIVITIES | Average |
|---|---|
| 1. Reading (book, newspaper, magazine, etc.) | 2.65 |
| 2. Writing (poem, novel, essay, etc.) | 1.92 |
| 3. Electronics and video games | 2.52 |
| 4. Painting | 1.87 |
| 5. Playing a musical instrument | 1.75 |
| 6. Collecting | 1.56 |
| 7. Astronomy | 1.75 |
| 8. Gardening and plant growing | 2.32 |
| 9. Marksmanship | 1.85 |
| 10. Hobby groups (dancing, chorus, etc.) | 1.71 |
| 11. Voluntary activities aimed at social benefits | 1.95 |
| 12. Museum visits, concerts, exhibitions | 1.97 |
| 13. Meeting with relatives or friends | 3.10 |
| 14. Theatre and cinema | 2.04 |
| 15. Picnic | 2.29 |
| 16. Hobby courses | 1.78 |
| 17. Dining out | 2.36 |
| 18. Football field matches | 2.01 |
| 19. Driving around | 2.25 |
| 20. Short-term camping | 1.73 |
| 21. Nature photography | 2.06 |
| 22. Television and movies | 3.31 |
| 23. Radio | 2.55 |
| 24. Music | 3.55 |
| 25. Shopping mall visits and shopping | 2.30 |
| 26. Cooking as a hobby | 2.21 |
| 27. Fishing | 1.82 |
| 28. Pets | 2.15 |
| 29. Theme parks | 1.81 |
| 30. Board games such as monopoly, taboo, etc. | 1.85 |
| 31. Games such as bowling, paintball, go-cart, etc. | 1.77 |
| 32. Defence sports (kick box, karate, etc.) | 1.84 |
| 33. Running | 2.54 |
| 34. Swimming | 2.31 |
| 35. Walking | 2.87 |
| 36. Cycling | 2.26 |
| 37. Basketball | 2.17 |
| 38. Volleyball | 2.18 |
| 39. Football | 2.35 |
| 40. Tennis | 1.80 |
| 41. Handball | 1.63 |
| 42. Body building | 2.02 |
| 43. Archery | 1.50 |

(1) Every day, (5) Never

Based on the answers given by students included in the present study, Table 6 shows that “music”, “television and movies” and “meeting with relatives and friends” are the most popular recreational activities with average scores 3.55, 3.31 and 3.10, respectively.

**Table 7: The Difference between the Mathematics Grades and Frequency of Participation in Recreational Activities by Students Included in the Study**

| RECREATIONAL ACTIVITIES | RANGE OF MATHEMATICAL GRADES | | | | | F | P |
|---|---|---|---|---|---|---|---|
| | 0-49 | 50-59 | 60-69 | 70-84 | 85-100 | | |
| 1. Reading (book, newspaper, magazine, etc.) | 2.67 | 2.66 | 2.39 | 3.02 | 2.42 | 3.511 | ,008* |
| 2. Writing (poem, novel, essay, etc.) | 2.33 | 1.75 | 1.69 | 2.25 | 1.96 | 4.812 | ,001* |
| 3. Electronics and video games | 2.67 | 2.59 | 2.19 | 2.62 | 2.85 | 2.273 | ,061 |
| 4. Painting | 1.93 | 1.87 | 1.73 | 1.87 | 2.19 | 1.403 | ,232 |
| 5. Playing a musical instrument | 1.73 | 1.83 | 1.73 | 1.74 | 1.69 | ,150 | ,963 |
| 6. Collecting | 1.83 | 1.71 | 1.37 | 1.52 | 1.48 | 2.064 | ,085 |
| 7. Astronomy | 1.73 | 1.91 | 1.67 | 1.73 | 1.54 | ,962 | ,428 |
| 8. Gardening and plant growing | 2.07 | 2.47 | 2.21 | 2.50 | 2.02 | 1.706 | ,148 |
| 9. Marksmanship | 2.07 | 1.79 | 1.95 | 1.72 | 1.81 | ,696 | ,595 |
| 10. Hobby groups (dancing, chorus, etc.) | 1.77 | 1.83 | 1.61 | 1.77 | 1.52 | ,974 | ,421 |
| 11. Voluntary activities aimed at social benefits | 2.10 | 2.10 | 1.81 | 2.00 | 1.75 | 1.382 | ,239 |
| 12. Museum visits, concerts, exhibitions | 1.83 | 2.01 | 1.95 | 2.00 | 1.98 | ,162 | ,958 |
| 13. Meeting with relatives or friends | 2.63 | 3.25 | 3.03 | 3.24 | 3.02 | 1.519 | ,196 |
| 14. Theatre and cinema | 1.80 | 2.12 | 1.88 | 2.22 | 1.96 | 1.863 | ,116 |
| 15. Picnic | 2.17 | 2.31 | 2.32 | 2.34 | 2.18 | ,296 | ,880 |
| 16. Hobby courses | 1.67 | 1.68 | 1.77 | 1.79 | 2.00 | ,760 | ,552 |
| 17. Dining out | 2.27 | 2.67 | 2.10 | 2.48 | 2.10 | 3.531 | ,008* |
| 18. Football field matches | 2.17 | 2.01 | 1.90 | 2.02 | 2.13 | ,447 | ,775 |
| 19. Driving around | 2.27 | 2.36 | 2.03 | 2.49 | 2.02 | 2.066 | ,085 |
| 20. Short-term camping | 1.80 | 1.80 | 1.63 | 1.73 | 1.65 | ,404 | ,806 |
| 21. Nature photography | 1.83 | 2.07 | 2.17 | 1.97 | 2.06 | ,518 | ,723 |
| 22. Television and movies | 2.90 | 3.38 | 3.30 | 3.44 | 3.13 | ,996 | ,410 |
| 23. Radio | 2.57 | 2.60 | 2.37 | 2.70 | 2.58 | ,705 | ,589 |
| 24. Music | 3.43 | 3.81 | 3.23 | 3.79 | 3.40 | 2.840 | ,024* |
| 25. Shopping mall visits and shopping | 2.40 | 2.37 | 2.01 | 2.57 | 2.21 | 2.719 | ,029* |
| 26. Cooking as a hobby | 2.23 | 2.25 | 1.97 | 2.29 | 2.46 | 1.368 | ,244 |
| 27. Fishing | 1.80 | 1.77 | 1.76 | 1.78 | 2.23 | 1.573 | ,181 |
| 28. Pets | 1.93 | 2.24 | 1.90 | 2.49 | 2.00 | 2.561 | ,038* |
| 29. Theme parks | 1.73 | 1.72 | 1.80 | 1.92 | 1.88 | ,454 | ,770 |
| 30. Board games such as monopoly, taboo, etc. | 1.67 | 1.80 | 1.80 | 1.93 | 2.04 | ,652 | ,626 |
| 31. Games such as bowling, paintball, go-cart, etc. | 1.60 | 1.70 | 1.74 | 1.88 | 1.73 | ,494 | ,740 |
| 32. Defence sports (kick box, karate, etc.) | 1.87 | 1.80 | 1.82 | 1.89 | 1.85 | ,081 | ,988 |
| 33. Running | 2.13 | 2.61 | 2.52 | 2.57 | 2.46 | ,715 | ,582 |
| 34. Swimming | 2.13 | 2.41 | 2.20 | 2.36 | 2.29 | ,473 | ,756 |
| 35. Walking | 2.33 | 2.59 | 2.75 | 3.23 | 3.33 | 4.673 | ,001* |
| 36. Cycling | 1.90 | 2.15 | 2.29 | 2.54 | 2.06 | 2.177 | ,071 |
| 37. Basketball | 1.97 | 2.01 | 2.11 | 2.38 | 2.23 | 1.397 | ,234 |
| 38. Volleyball | 2.13 | 2.05 | 2.05 | 2.29 | 2.56 | 1.870 | ,115 |
| 39. Football | 2.00 | 2.25 | 2.48 | 2.37 | 2.52 | ,926 | ,449 |
| 40. Tennis | 1.57 | 1.63 | 1.75 | 2.04 | 1.85 | 1.920 | ,106 |
| 41. Handball | 1.70 | 1.51 | 1.43 | 1.90 | 1.69 | 2.800 | ,026* |
| 42. Body building | 1.97 | 2.12 | 1.87 | 2.19 | 1.77 | 1.281 | ,277 |
| 43. Archery | 1.67 | 1.43 | 1.37 | 1.67 | 1.42 | 1.521 | ,195 |

* $p < \alpha = .05$;

(1) I never do (2) Once a month (3) Once a week (4) 2-3 times a week (5) Everyday

Table 7 shows the result of the variance analysis applied for the purpose of studying the difference between the frequency of participation in the recreational activities with the grades of the students included in the study in mathematics classes. The analysis performed based on the grades in mathematics classes revealed a statistical difference in the frequency of participation in "reading (book, newspaper, magazine, etc.), writing (poem, novel, essay, etc.), dining out, music, visiting shopping malls and shopping, pets, walking and handball" activities.

**Table 8: The Difference between the Literature Grades and Frequency of Participation in Recreational Activities by Students Included in the Study**

| RECREATIONAL ACTIVITIES | RANGE OF LITERATURE GRADES | | | | F | P |
|---|---|---|---|---|---|---|
| | 50-59 | 60-69 | 70-84 | 85-100 | | |
| 1. Reading (book, newspaper, magazine, etc.) | 2.54 | 2.28 | 2.61 | 3.28 | 9.778 | ,000* |
| 2. Writing (poem, novel, essay, etc.) | 2.12 | 1.73 | 1.92 | 2.06 | 1.922 | ,125 |
| 3. Electronics and video games | 2.20 | 2.57 | 2.57 | 2.57 | 1.986 | ,115 |
| 4. Painting | 1.98 | 1.76 | 1.96 | 1.78 | 1.055 | ,368 |
| 5. Playing a musical instrument | 2.00 | 1.83 | 1.54 | 1.82 | 2.744 | ,043* |
| 6. Collecting | 1.88 | 1.62 | 1.42 | 1.41 | 3.512 | ,015* |
| 7. Astronomy | 2.15 | 1.72 | 1.65 | 1.59 | 3.331 | ,020* |
| 8. Gardening and plant growing | 2.32 | 2.36 | 2.43 | 2.07 | 1.238 | ,295 |
| 9. Marksmanship | 2.05 | 2.12 | 1.69 | 1.58 | 4.088 | ,007* |
| 10. Hobby groups (dancing, chorus, etc.) | 1.89 | 1.77 | 1.57 | 1.73 | 1.504 | ,213 |
| 11. Voluntary activities aimed at social benefits | 2.09 | 2.07 | 1.74 | 2.04 | 2.529 | ,057 |
| 12. Museum visits, concerts, exhibitions | 1.83 | 2.09 | 1.88 | 2.09 | 1.355 | ,256 |
| 13. Meeting with relatives or friends | 2.78 | 2.97 | 3.24 | 3.32 | 2.570 | ,054 |
| 14. Theatre and cinema | 1.98 | 2.07 | 1.97 | 2.13 | ,438 | ,726 |
| 15. Picnic | 2.20 | 2.37 | 2.24 | 2.36 | ,622 | ,601 |
| 16. Hobby courses | 1.78 | 1.83 | 1.71 | 1.81 | ,325 | ,807 |
| 17. Dining out | 2.14 | 2.60 | 2.24 | 2.42 | 2.407 | ,067 |
| 18. Football field matches | 2.26 | 2.04 | 1.99 | 1.79 | 1.763 | ,154 |
| 19. Driving around | 2.35 | 2.21 | 2.27 | 2.19 | ,214 | ,887 |
| 20. Short-term camping | 1.85 | 1.84 | 1.64 | 1.56 | 1.438 | ,231 |
| 21. Nature photography | 1.95 | 2.31 | 1.90 | 2.07 | 2.105 | ,099 |
| 22. Television and movies | 2.88 | 3.18 | 3.58 | 3.33 | 3.798 | ,010* |
| 23. Radio | 2.51 | 2.63 | 2.55 | 2.51 | ,135 | ,939 |
| 24. Music | 3.26 | 3.48 | 3.52 | 3.95 | 2.828 | ,038* |
| 25. Shopping mall visits and shopping | 2.28 | 2.31 | 2.26 | 2.39 | ,176 | ,913 |
| 26. Cooking as a hobby | 2.06 | 2.14 | 2.34 | 2.18 | ,775 | ,508 |
| 27. Fishing | 1.85 | 1.95 | 1.81 | 1.67 | ,902 | ,440 |
| 28. Pets | 2.08 | 2.18 | 2.18 | 2.15 | ,085 | ,968 |
| 29. Theme parks | 1.72 | 1.88 | 1.89 | 1.67 | ,911 | ,436 |
| 30. Board games such as monopoly, taboo, etc. | 1.70 | 1.82 | 1.79 | 2.13 | 1.994 | ,114 |
| 31. Games such as bowling, paintball, go-cart, etc. | 1.80 | 1.75 | 1.72 | 1.79 | ,101 | ,959 |
| 32. Defence sports (kick box, karate, etc.) | 1.98 | 2.05 | 1.81 | 1.52 | 3.183 | ,024* |
| 33. Running | 2.37 | 2.65 | 2.46 | 2.58 | ,681 | ,564 |
| 34. Swimming | 2.48 | 2.46 | 2.31 | 1.96 | 2.462 | ,062 |
| 35. Walking | 2.28 | 2.75 | 2.93 | 3.39 | 6.951 | ,000* |
| 36. Cycling | 2.11 | 2.31 | 2.36 | 2.18 | ,676 | ,567 |
| 37. Basketball | 1.86 | 2.25 | 2.22 | 2.18 | 1.443 | ,230 |
| 38. Volleyball | 1.89 | 2.19 | 2.24 | 2.29 | 1.441 | ,230 |
| 39. Football | 2.11 | 2.60 | 2.52 | 1.98 | 4.219 | ,006* |
| 40. Tennis | 1.66 | 1.78 | 1.89 | 1.75 | ,616 | ,605 |
| 41. Handball | 1.74 | 1.58 | 1.70 | 1.47 | 1.019 | ,384 |
| 42. Body building | 2.00 | 2.30 | 1.99 | 1.69 | 3.142 | ,025* |
| 43. Archery | 1.60 | 1.41 | 1.61 | 1.33 | 1.767 | ,153 |

* $p < \alpha = .05$;

(1) I never do (2) Once a month (3) Once a week (4) 2-3 times a week (5) Everyday

Table 8 shows the result of the variance analysis applied for the purpose of studying the difference between the frequencies of participation in the recreational activities with the grades of the students included in the study in literature classes. The analysis performed based on the grades in literature classes revealed a statistical difference in the frequency of participation in "reading (book, newspaper, magazine, etc.), playing a musical instrument, collecting, astronomy, marksmanship, television and movies, music, defence sports (kick box, karate, etc.) walking, football and body-building" activities.

**Table 9: The Difference between the English Grades and Frequency of Participation in Recreational Activities by Students Included in the Study**

| RECREATIONAL ACTIVITIES | RANGE OF ENGLISH GRADES | | | | | F | P |
|---|---|---|---|---|---|---|---|
| | 0-49 | 50-59 | 60-69 | 70-84 | 85-100 | | |
| 1. Reading (book, newspaper, magazine, etc.) | 2.71 | 2.21 | 2.19 | 2.88 | 3.24 | 10.847 | ,000* |
| 2. Writing (poem, novel, essay, etc.) | 2.12 | 1.71 | 1.84 | 2.07 | 2.00 | 1.421 | ,226 |
| 3. Electronics and video games | 3.35 | 2.24 | 2.39 | 2.67 | 2.54 | 2.570 | ,038* |
| 4. Painting | 2.12 | 1.82 | 1.56 | 2.02 | 2.02 | 3.081 | ,016* |
| 5. Playing a musical instrument | 1.76 | 1.88 | 1.69 | 1.57 | 1.98 | 1.736 | ,141 |
| 6. Collecting | 1.88 | 1.71 | 1.58 | 1.46 | 1.42 | 1.445 | ,218 |
| 7. Astronomy | 1.41 | 1.93 | 1.72 | 1.83 | 1.51 | 1.742 | ,140 |
| 8. Gardening and plant growing | 2.94 | 2.43 | 2.16 | 2.50 | 2.01 | 2.854 | ,024* |
| 9. Marksmanship | 1.71 | 1.76 | 2.04 | 1.96 | 1.51 | 2.333 | ,055 |
| 10. Hobby groups (dancing, chorus, etc.) | 1.18 | 1.79 | 1.61 | 1.83 | 1.67 | 1.744 | ,139 |
| 11. Voluntary activities aimed at social benefits | 1.76 | 1.87 | 1.89 | 1.97 | 2.10 | ,607 | ,658 |
| 12. Museum visits, concerts, exhibitions | 1.47 | 2.01 | 1.82 | 2.23 | 1.83 | 3.162 | ,014* |
| 13. Meeting with relatives or friends | 3.06 | 3.00 | 2.89 | 3.28 | 3.23 | 1.367 | ,245 |
| 14. Theatre and cinema | 1.88 | 1.99 | 1.98 | 2.14 | 2.01 | ,469 | ,758 |
| 15. Picnic | 2.59 | 2.20 | 2.26 | 2.33 | 2.30 | ,527 | ,716 |
| 16. Hobby courses | 1.65 | 1.64 | 1.70 | 1.90 | 1.82 | ,866 | ,484 |
| 17. Dining out | 2.76 | 2.46 | 2.19 | 2.45 | 2.26 | 1.309 | ,266 |
| 18. Football field matches | 2.12 | 2.04 | 2.02 | 2.08 | 1.82 | ,600 | ,663 |
| 19. Driving around | 2.24 | 2.26 | 2.17 | 2.28 | 2.30 | ,122 | ,974 |
| 20. Short-term camping | 1.94 | 1.75 | 1.55 | 1.85 | 1.62 | 1.322 | ,261 |
| 21. Nature photography | 1.65 | 1.89 | 1.89 | 2.34 | 2.05 | 2.425 | ,048* |
| 22. Television and movies | 2.76 | 3.00 | 3.37 | 3.41 | 3.46 | 1.798 | ,128 |
| 23. Radio | 2.41 | 2.49 | 2.40 | 2.82 | 2.43 | 1.422 | ,226 |
| 24. Music | 3.59 | 3.36 | 3.41 | 3.54 | 3.95 | 1.969 | ,098 |
| 25. Shopping mall visits and shopping | 2.24 | 2.28 | 2.06 | 2.51 | 2.31 | 1.665 | ,157 |
| 26. Cooking as a hobby | 2.12 | 2.13 | 2.07 | 2.39 | 2.17 | ,933 | ,444 |
| 27. Fishing | 2.18 | 1.86 | 1.85 | 1.87 | 1.62 | 1.063 | ,374 |
| 28. Pets | 2.24 | 1.91 | 2.17 | 2.25 | 2.21 | ,705 | ,589 |
| 29. Theme parks | 2.35 | 1.67 | 1.71 | 1.96 | 1.74 | 2.068 | ,084 |
| 30. Board games such as monopoly, taboo, etc. | 2.35 | 1.71 | 1.69 | 1.95 | 1.93 | 1.764 | ,135 |
| 31. Games such as bowling, paintball, go-cart, etc. | 2.00 | 1.80 | 1.66 | 1.76 | 1.76 | ,385 | ,819 |
| 32. Defence sports (kick box, karate, etc.) | 1.82 | 1.79 | 1.88 | 1.91 | 1.74 | ,277 | ,893 |
| 33. Running | 2.82 | 2.41 | 2.44 | 2.48 | 2.71 | ,820 | ,513 |
| 34. Swimming | 2.00 | 2.45 | 2.45 | 2.28 | 2.10 | 1.136 | ,339 |
| 35. Walking | 3.00 | 2.36 | 2.87 | 2.83 | 3.39 | 4.725 | ,001* |
| 36. Cycling | 2.29 | 2.01 | 2.27 | 2.44 | 2.21 | 1.249 | ,290 |
| 37. Basketball | 2.06 | 1.93 | 2.05 | 2.31 | 2.30 | 1.444 | ,219 |
| 38. Volleyball | 1.94 | 2.04 | 1.90 | 2.37 | 2.40 | 2.999 | ,019* |
| 39. Football | 3.18 | 2.33 | 2.43 | 2.31 | 2.23 | 1.600 | ,173 |
| 40. Tennis | 2.06 | 1.68 | 1.66 | 1.94 | 1.79 | 1.132 | ,341 |
| 41. Handball | 1.65 | 1.55 | 1.80 | 1.69 | 1.39 | 1.693 | ,151 |
| 42. Body building | 2.53 | 1.87 | 2.20 | 2.03 | 1.79 | 1.885 | ,112 |
| 43. Archery | 1.76 | 1.49 | 1.60 | 1.53 | 1.27 | 1.506 | ,200 |

* $p < \alpha = .05$;

(1) I never do (2) Once a month (3) Once a week (4) 2-3 times a week (5) Everyday

Table 9 shows the result of the variance analysis applied for the purpose of studying the difference between the frequencies of participation in the recreational activities with the grades of the students included in the study in English classes. The analysis performed based on the grades in English classes revealed a statistical difference in the frequency of participation in "reading (book, newspaper, magazine, etc.), electronics and video games, painting, gardening and plant growing, visiting museums, concerts, exhibitions, nature photography, walking, volleyball" activities.

**Table 10: The Difference between the History Grades and Frequency of Participation in Recreational Activities by Students Included in the Study**

| RECREATIONAL ACTIVITIES | RANGE OF HISTORY GRADES | | | | F | P |
|---|---|---|---|---|---|---|
| | 50-59 | 60-69 | 70-84 | 85-100 | | |
| 1. Reading (book, newspaper, magazine, etc.) | 2.81 | 2.13 | 2.76 | 2.79 | 5.342 | ,001* |
| 2. Writing (poem, novel, essay, etc.) | 1.89 | 1.86 | 1.97 | 1.98 | ,252 | ,860 |
| 3. Electronics and video games | 2.23 | 2.58 | 2.51 | 2.70 | 1.666 | ,174 |
| 4. Painting | 1.86 | 1.84 | 1.99 | 1.78 | ,752 | ,521 |
| 5. Playing a musical instrument | 1.90 | 1.83 | 1.64 | 1.71 | ,981 | ,402 |
| 6. Collecting | 1.72 | 1.67 | 1.48 | 1.41 | 2.098 | ,100 |
| 7. Astronomy | 2.06 | 1.60 | 1.72 | 1.62 | 2.733 | ,043* |
| 8. Gardening and plant growing | 2.34 | 2.27 | 2.40 | 2.26 | ,257 | ,856 |
| 9. Marksmanship | 1.98 | 2.14 | 1.76 | 1.60 | 3.285 | ,021* |
| 10. Hobby groups (dancing, chorus, etc.) | 1.92 | 1.59 | 1.79 | 1.56 | 2.210 | ,086 |
| 11. Voluntary activities aimed at social benefits | 1.94 | 2.04 | 1.93 | 1.91 | ,209 | ,890 |
| 12. Museum visits, concerts, exhibitions | 2.08 | 1.81 | 1.98 | 2.00 | ,843 | ,471 |
| 13. Meeting with relatives or friends | 2.65 | 3.22 | 3.04 | 3.44 | 5.521 | ,001* |
| 14. Theatre and cinema | 1.95 | 1.99 | 2.03 | 2.13 | ,474 | ,701 |
| 15. Picnic | 2.00 | 2.48 | 2.33 | 2.33 | 3.042 | ,029* |
| 16. Hobby courses | 1.70 | 1.77 | 2.01 | 1.59 | 3.131 | ,026* |
| 17. Dining out | 2.20 | 2.45 | 2.43 | 2.32 | ,730 | ,534 |
| 18. Football field matches | 1.93 | 2.01 | 1.95 | 2.11 | ,455 | ,714 |
| 19. Driving around | 2.11 | 2.37 | 2.25 | 2.26 | ,518 | ,670 |
| 20. Short-term camping | 1.88 | 1.63 | 1.81 | 1.55 | 1.856 | ,136 |
| 21. Nature photography | 2.25 | 1.93 | 2.18 | 1.87 | 1.893 | ,130 |
| 22. Television and movies | 3.12 | 3.48 | 3.19 | 3.44 | 1.371 | ,251 |
| 23. Radio | 2.54 | 2.57 | 2.45 | 2.66 | ,385 | ,764 |
| 24. Music | 3.30 | 3.70 | 3.63 | 3.57 | 1.097 | ,350 |
| 25. Shopping mall visits and shopping | 2.33 | 2.23 | 2.30 | 2.34 | ,118 | ,949 |
| 26. Cooking as a hobby | 2.05 | 2.28 | 2.39 | 2.08 | 1.484 | ,218 |
| 27. Fishing | 1.75 | 1.81 | 1.86 | 1.85 | ,180 | ,910 |
| 28. Pets | 2.04 | 1.95 | 2.12 | 2.43 | 2.058 | ,105 |
| 29. Theme parks | 1.93 | 1.73 | 1.87 | 1.73 | ,688 | ,560 |
| 30. Board games such as monopoly, taboo, etc. | 1.70 | 1.73 | 1.86 | 2.05 | 1.781 | ,150 |
| 31. Games such as bowling, paintball, go-cart, etc. | 1.67 | 1.87 | 1.73 | 1.76 | ,406 | ,749 |
| 32. Defence sports (kick box, karate, etc.) | 1.77 | 2.12 | 1.83 | 1.70 | 1.958 | ,120 |
| 33. Running | 2.57 | 2.70 | 2.42 | 2.47 | ,744 | ,526 |
| 34. Swimming | 2.33 | 2.64 | 2.15 | 2.22 | 2.248 | ,082 |
| 35. Walking | 2.60 | 2.76 | 2.84 | 3.18 | 2.573 | ,054 |
| 36. Cycling | 2.14 | 2.36 | 2.37 | 2.17 | ,791 | ,499 |
| 37. Basketball | 2.01 | 2.22 | 2.28 | 2.10 | ,833 | ,476 |
| 38. Volleyball | 2.13 | 2.12 | 2.37 | 2.06 | 1.333 | ,263 |
| 39. Football | 2.12 | 2.59 | 2.23 | 2.51 | 2.147 | ,094 |
| 40. Tennis | 1.66 | 1.78 | 1.91 | 1.78 | ,720 | ,540 |
| 41. Handball | 1.46 | 1.70 | 1.67 | 1.65 | ,820 | ,483 |
| 42. Body building | 1.90 | 2.17 | 2.04 | 1.95 | ,636 | ,592 |
| 43. Archery | 1.36 | 1.33 | 1.62 | 1.58 | 2.035 | ,108 |

* $p < \alpha = .05$;

(1) I never do (2) Once a month (3) Once a week (4) 2-3 times a week (5) Everyday

Table 10 shows result of the variance analysis applied for the purpose of studying the difference between the frequencies of participation in the recreational activities with the grades of the students included in the study in history classes. The analysis performed based on the grades in history classes revealed a statistical difference in the frequency of participation in "reading (book, newspaper, magazine, etc.), astronomy, marksmanship, meeting with relatives and friends, picnic and hobby courses" activities.

**Table 11: The Difference between the Level of Academic Success of Students Included in the Study and Opinions on Sufficiency of Opportunities at Schools**

| Class | **Average Grades** | **N** | $\bar{x}$ | **S** | **F** | **p** |
|---|---|---|---|---|---|---|
| Mathematics | 0-49 Points | 30 | 11.4667 | 4.47008 | ,422 | ,793 |
| | 50-59 Points | 106 | 11.1792 | 4.46318 | | |
| | 60-69 Points | 117 | 10.7692 | 4.29993 | | |
| | 70-84 Points | 107 | 11.5047 | 4.74317 | | |
| | 84-100 Points | 49 | 11.1837 | 4.10119 | | |
| Literature | 0-59 Points | 66 | 10.1970 | 4.72056 | 2.913 | ,034* |
| | 60-69 Points | 110 | 11.3455 | 4.44835 | | |
| | 70-84 Points | 147 | 10.8707 | 4.34989 | | |
| | 84-100 Points | 86 | 12.1977 | 4.20593 | | |
| English | 0-49 Points | 17 | 12.1176 | 5.45301 | 2.208 | ,067 |
| | 50-59 Points | 76 | 10.2895 | 4.18510 | | |
| | 60-69 Points | 102 | 10.5588 | 4.14723 | | |
| | 70-84 Points | 128 | 11.6563 | 4.52019 | | |
| | 84-100 Points | 86 | 11.7558 | 4.53467 | | |
| History | 0-59 Points | 83 | 11.4096 | 4.71902 | 1.216 | ,304 |
| | 60-69 Points | 84 | 10.9524 | 4.30999 | | |
| | 70-84 Points | 126 | 11.6508 | 4.40966 | | |
| | 84-100 Points | 116 | 10.6293 | 4.34497 | | |

* $p < \alpha = .05$;

Table 11 shows the one-way analysis of variance applied for the purpose of studying the difference between the levels of academic success of students included in the study and opinions on sufficiency of opportunities at schools. Accordingly, there is a statistical difference between the literature grades of the students included in the study and their opinions on the sufficiency of the opportunities provided at their schools. (F= 2,913, p=,035< α=,05)

## *4. Discussion and Conclusion*

Findings of the study revealed that almost all results are similar to those presented in the literature; however there are limited number of studies focusing on both recreational activities and the level of academic success of students despite the fact that both of the contexts are studied extensively. In the recent years, studies (Yaşartürk, 2013; Mutlu, 2011; Özekes, 2011; Gökalp, 2007; Kırkpınar, 2004; Özkaptan 2007; Yetiş 2008; Yılmaz 2005; Çoruh, 2013; Tezcan, 2007; Kalaycı, 2008; Gülbahçe, 1999; Gül, 2008; Eminoğlu, 2011; Yaman, 2009; Köse, 2013 ) were carried out on the recreational activity tendencies and academic success, recreational preferences of students and the youth. It is observed that recreation and academic success were addressed in one study (Knepp, 2011).

A study was carried out by Yasarturk (2013) for the purpose of determining the recreational activity tendencies of high school and university students and how they spend their spare times. It was observed that high school students included in the study have less daily free time when compared with the university students. Likewise, high school students have less weekly free-time as is the case with the daily free-time. It can be concluded that high school students spend their free times at home as they stay with their families. Mutlu (2011) conducted a study for the purpose of determining the factors motivating individuals towards recreational exercises and comparing them with different variables.

The results revealed that "stimulating living", "knowing achieving", "and identification/introjections" are the top 3 factors motivating individuals for free-time activities. A study conducted by Ozekes (2011) revealed that free-time activities of the handicapped are affected by factors such as age, gender, place of residence, income level of the family and thus they perform different types of activities in the adolescence period. As the study did not focus particularly on the duration of participating in free time activities and the extent of using available time in specific activities, it is required to conduct new studies on the extent of time spared for certain activities by the youth. It has been concluded that identifying the preferences or activities desired but cannot be performed by the youth and establishing the required conditions would facilitate the self-discovery process of this age group in the course of personal development. The parallel correlation between the increased income level of the household and interest in artistic activities may be seen as normal. Participation in the artistic activities require a certain level of economic support.

Therefore, adolescents from low income groups cannot participate in such activities. A study conducted by Kirkpinar (2004) shows that high school students do not use their free-time as required and sufficiently, they show passive participation and spend their time by resting and watching TV at home and they do not participate in other activities as they belong to medium-income segment. It is suggested that students' tendency to spend their free-time through passive participation is an indication of the lack of education on this matter, and efficient and dynamic activities reducing the level of anxiety and stress are required among the youth of 17-18 age group enjoying the last years of the adolescence period, worrying about the future and preparing for the university entrance exams. Families should take measures allowing their children to use their time effectively during the week and at weekends. Students should be guided towards sportive, cultural activities preventing them from spending their time passively by watching TV at home. School management and teachers should organize activities such as music, painting, handicrafts, etc., converting passive participation of students into active participation. Ministry of National Education is suggested to take measure in order to create free time in consideration of the number of credits in the curriculum of the final grade students at high school. Review and comparison of the findings obtained in the present study and study of Ozkaptan (2007) revealed significant differences between the non-class social club activities and events organized by private schools and public schools.

A majority of the public school students saw the reason of joining the club as "**making use of free time**", and a majority of the private school students saw the reason of such activities as "**engaging in an enjoyable activity and learning about the recent developments in a particular field of interest**". It was revealed that half of the students at public schools know about the objectives and benefits of clubs while the remaining half is unaware of the foregoing. In a study conducted by Yetis (2008), discussions are provided on findings concerning the statistical correlation between certain demographical variables (gender, type of school, type of class, and education level of parents), tendency to make use of free time, bad habits, and interest and attitude towards violence. In the study, it was concluded that 77.9% of the students do not attend "private courses", 22.1% attend "private courses", 57.3% think that they have "sufficient" free time and 42.7% think they have "insufficient" free time. Opinions of students about the level of effect created on their success level by their free time activities showed significant differences by genders. The study also suggested that sufficiency level of the time students have for free time activities vary based on the type of schools.

A study conducted by Yilmaz (2005) showed that leadership role and external factors driving the recreational themes are recreational awareness development within the scope of recreation program theme, development of self-confidence and skill acquisition, free time activities within the scope of recreational program or participation in the sportive activities. The common approach of the families and the idea that recreational activities have adverse impact on academic success are factors affecting the level of participation to recreational activities. Free time is a rightful and valuable sphere allowing the youth to find their identities. Therefore, all levels of management should develop healthy and wise recreational opportunities and ensure that programs are accessible by individuals from all segments under equal conditions. Both young individuals and individuals having ties with and working for the youth (teachers, managers, parents, etc.) should be provided with training on free time and recreational activities. Formal education provided by higher education institutions, continuing education as well as technical courses, in-service trainings, combined courses and certification courses adapted to local conditions should provide wide-range of recreational education opportunities.

It was found that students and families are not informed sufficiently on recreational activities offered at schools. Development and implementation of the recreational activities must be supported by the Provincial Directorates of Youth and Sport and Provincial Directorates of National Education in order to improve the level of participation in these programs. It was observed that participation in recreational activities is one of the possibilities improving the academic success of students. Particular attention must be attached to campus recreation. Students must be encouraged to recreational activities with every occasion. Students should participate in recreational activities in order to enjoy the social, physical benefits improving the academic success. It is suggested that there are numerous reasons for schools to increase the recreational activities in the campus.

## *Resources*

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