

## INVESTIGATING THE EFFECTS OF SCHOOL PHYSICAL EXERCISES AND EXTRA PROGRAM ACTIVITIES ON STUDENTS' SOCIAL BEHAVIOR

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### ABSTRACT

**Purpose:** The physical education and exercise is an integral part of education that is effective in the access to its purposes in different ways. **Methods:** This study is a quasi-experimental research and the population includes all male and female guidance-school students in Northern Savadkooh who were 740 people. The Krejcie and Morgan table was used to determine the sample and 120 girls and 134 boys were selected. To assess the public health, (TISS, Inderbitzen and Foster, 1992) was used. Descriptive statistics methods such as frequency tables and figures as well as the inferential statistics including the Kolmogorov–Smirnov test and Paired-Sample t-test were used to analyze the hypotheses. **Results:** The results indicated that exercise and the extra program activities are effective on the social behavior of the male and female guidance-school students in Northern Savadkooh. **conclusion:** The teachers should pay attention to the direction of skills by the extracurricular activities.

**Keywords:** Physical Exercise, extra program activities, social behavior, student

## 1. INTRODUCTION

The physical education and exercise is an integral part of education that is effective in the access to its purposes in different ways. The physical education is a didactic- educative process that aims to improve the performance and growth of the human by the physical activities and with the emphasis which it put on the physical, mental and emotional upbringing and the social propriety. While proper performance, it can play its considerable role in the education and the triple scope of learning namely cognitive, emotional and psychical- motional. In other words, the physical education can result in the access to the purposes such as the improvement of educational function, memory enhancing, preparation for learning, improvement and facilitation of learning, self- confidence, improvement of personal relationships, responsible behavior, independence, skillful movement, physical preparation, active and dynamic life, and effective use of leisure time **(West & Butcher, 1997)**.

Based on this, the physical education course is one of the major courses in the most of the schools that is linked to the educational system by the syllabus **(Javadipoor et al., 2006)**.

**Burga-Falla et al.(2024)** showed that the study concluded that extracurricular activities are important for Peruvian elementary students, as they can foster their creativity and boost their academic performance. The appearance of new thoughts and viewpoints of education in the eighteenth century which was the opening of significant evolutions in the education system, more than anything created changes and evolutions in the syllabus viewpoints. The appearance of new concepts such as extracurricular activities was the precautionary answer which was expressed and displayed that schools can have no reaction to the new needs and viewpoints. So, the extracurricular activities were attended along with the formal syllabus so that it can provide the new requirements and requests of the schools **(Esmaeeli, 2008)**.

]Sports activities can improve children and adolescents' prosocial behaviors. Different sports activities also influence children and adolescents' prosocial behaviors differently. Moreover, sports activities can improve the prosocial behaviors of children and adolescents with special educational needs **(Jiayu&Weide ,2022)**.

The syllabus, in a division, is divided into three categories: compulsory courses, optional courses, and extracurricular activities. A set of activities which are done out of the formal framework of the class is considered to be extracurricular activities **(Fathi, 2007)**.

**Moriyana et al.(2006)** believed that the extracurricular activities are the supplementary activities which are executed under the supervision of the principal. The extracurricular activities are one of the precious cases that can attract the attention of teachers and educators for the purpose of direction and guidance, improvement of the level of learning, and identification and discovery of latent talents of the students. The extracurricular activities are very effective in the sociability and preservation of independence and personality of the students and it is a good chance for the teachers and counselors and specially the cognizant and sympathetic educators and principals that by this way, they can help the students to be sociable with the participation in the different groups and release them of the seclusion **(Shoarinezhad, 1998)**.

The extracurricular activities are almost informal activities which are not restricted to the class and even sometimes to the school and are more affected by the amount of interest, experience, attendance and creativity of the teacher and students. These kinds of planned formal activities or the informal ones are named the extracurricular activities **(Seif, 1992)**.

The educated persons of today are the managers of future society. If the students participate in the extracurricular activities of the schools and have faith in the vogue methods at the school, they would be qualified and self- made persons in the society. The participation of

students in some of the extracurricular activities can accompany the education with the cordiality (Zahedi, 2003).

The formal syllabus stays fixed for several years. Therefore, it cannot perfectly provide the students' needs. If the extracurricular activities were properly selected and planned, they can easily compensate this reversal. Any kind of curricular or extracurricular activity can be beneficial provided that it be changed successively with regard to the scientific and educational findings. Having the social skills is one of the essential necessities of today life. This necessity is in special tangible in the adolescence and youth stages at which the individuals encounter different situations. In this regard, the school and teachers play so important role (Fathi et al., 2005).

JI & Zheng (2021) showed that physical exercise has a positive effect on college students MH and social adaptation ability. Colleges and universities could improve their MH and social adaptation ability by arranging appropriate PE. Being sociable is a process during which the child and adolescent accept the norms, roles, attitudes and generally the cultural and social patterns and act on them with satisfaction. Of course, this process, which results in the social development, is not a one-side current in which the society imposes its wishes on the child or the adolescent, but the adolescent him/herself plays a determinative role in the acceptance and doing the wishes of society (Ganji, 2008).

The physical education course has an important role in the substantiation of educational purposes for the reason of being consistent with the instinctive needs of the students, and it also covers different educational compasses and affects the students in the physical and psychical and social dimensions. Also, the physical education is a necessary component of education and consists of the planned, selected and purposeful movement experiences. These physical and movement activities provide a chance for the growth and evolution of children with regard to their needs and interests. The most of the education scientists believe that the children need the intensive physical and gestural activities for their favorable growth and developing their physical and mental abilities. So, the match and athletic champions ensure their participation in these kinds of activities. In fact, the exercise provides an opportunity to the individuals so that they can satisfy their instinct and desire to the competition and champion without any danger and express their wills under the terms and orders of the match and acquire the favorable educational interests of their champions and matches, because the individual likes to examine him/herself in comparison with the selfhood and the others and with the access to the success, begin the second efforts and get the excellent stages and the evolution of his/her life, be self- confident, respect him/herself and the other people and by this way, recognize his/her abilities and actuate them to idealism and human borders.

Barbosa et al. (2016) in an article titled School Environment, Inactive behavior and Physical activity in Preschool Children, concluded that the substructure and environment of the school should be considered as a method for the improvement and development of physical activity and the reduction of inactive behavior in the preschool children. According to the results of this research, the children spend about 10 percent of their attendance in the school for the physical activity and are inactive in the remains of time. The hobby room in the internal environment and the park prevent the children's inactive behavior and cause that the children be active in the upper ages.

Wan et al.(2021) found that physical activity has a significant positive effect on students prosocial behavior, and gender and the fathers education are significantly related to prosocial behavior. The extracurricular athletic activities not only attract the students who do the

athletic activities but also attract the ones who do not participate in these activities. The participation in the extracurricular athletic activities investigates an autonomous motivation toward the exercise because the students, by participating in these programs, begin to value and enjoy them. According to the acquired results, the participation in the extracurricular athletic activities is not related to the controlled motivation and the students' being motiveless in the exercise. The special attention should be paid to the girls because they participate less than the boys in the extracurricular athletic activities. Furthermore, the girls generally have less physical activity. From the scientific perspective, it is important to pay attention to this matter that the extracurricular athletic activities are only one of the tools to motivate the students to have an active style of life.

**Merkel .(2013)** in a research titled Positive and Negative Effects of Exercise on Adolescent Athletes concluded that the expected advantages of the participation of the children and adolescences in exercise are several cases such as the physical, psychical and social development. The first and most important of these cases is that the participation in the athletic activities results in further activity and expenditure of more time. The students who are involved in the athletic activities show the better psychical behavior in comparison with the ones who do not have any athletic activity.

**Three separate types of research in 2013** revealed that the individuals who participate in the extracurricular athletic activities, show better proficiency in the conduction of purposes, management of time, controlling emotions, leadership, rationality, social intelligence, cooperation, and self- scrutiny. The adolescent who participate in team- building exercises, are happier than the others and have more self- confidence and less stress and do not display any behavior based on suicide. The adolescents' exercise should be concentrated on the enjoyment and entertainment. The policies and methods applied in the adolescents' exercise should be based on the science. The programs which make the moral patterns should be developed in exercise. The programs which help the establishment of positive and healthy values are of special importance. The six pillars of personality namely reliability, respectability, responsibility, equanimity, surveillance, and civilization can be patterned by the adults who interact with the adolescents. These pillars can be of effective factors in the creation of friendship and cooperation in the friendly athletic societies.

**Masooni .(2011)** in a research titled Positive Effects of Extracurricular Activities on Students, concluded that the extracurricular activities are the ones in which the students participate and do not interfere with the educational program of the schools. These activities are seen at all levels in schools. The extracurricular activities are completely optional. So, there is no compulsion for the students who are not interested in participating in them. extracurricular activities have positive effects on the education. These effects include the behavior, high scores, fulfillment of school activities, the positive aspects of being a mature individual and also the social aspects.

**Hankok et al. (2012)** in a study titled Adolescents' Participation and Extracurricular Activities, Effect on Management Skills; concluded that the adolescents' perception of their management skills is affected by the fulfillment of extracurricular activities and the support of parents and the other adults. These findings are effective in the future social and scholastic activities and display the importance of adolescents' management skills at all levels of school and also the effect of the parents' support on the adolescents' perception of the management skills. The teachers should consider the direction of skills by the extracurricular activities. This act provides an opportunity to the apropos development of main skills of adolescents and causes that

they put into action what they have learned. According to the findings of the research, the parents' support for the adolescents who participate in the athletic activities or perform a role of leader or captain, is a vital factor in their perception of their leadership skills in the extracurricular athletic, scholastic and social activities. Also, the girls displayed a better perception of their leadership skills in the athletic activities in comparison with the boys. According to this study, the participation in the extracurricular athletic activities among the girls has much effect on their perception of the leadership skills in comparison with the boys.

**Yeob Kim et al. (2012)** in a study titled Relationship between School Function and Number of Physical Education Classes Held for Korean Adolescent Students, concluded that the participation in more than 3 classes during a week has positive relationship with the good function of the school and the participation in less than 3 physical education classes in a week has negative relationship with the school function in regard to the Korean adolescent students.

**Lanenbourg (2010)** in a study titled Extracurricular Activities concluded that the extracurricular activities are regarded as a fundamental and vital of education in America. These activities were included as well in the daily program of schools. The social activities, exercise, and all sportive activities have been changed to a part of not only educational values in America but also in the social life. The extracurricular activities balance the educational programs of schools by the encouragement to learning, completion of educational atmosphere, integration of knowledge and actualization of purposes of collective life. The extracurricular activities have a meaningful relationship with the increase of educational function of female students. Designing the educational courses aims to familiarize the students with the extracurricular activities so that they can be accommodated with their abilities by recognizing the elements of extracurricular activities and endeavor for further efflorescence of the organization.

**Sobhaninezhad et al.(2008)** in a study titled Specification of Challenges and Methods of Applying Extracurricular Activities of Schools for National Education of Students, concluded that the extracurricular activities have several positive effects such as the mental and psychical development of individuals, increase of personal responsibility and help the individuals to access to an independent personality, consolidation and unity in the society and pluralism. The participation of students in the management of affairs of cantonments, creation of healthy competition between them, the improvement of spirit of cooperation and collaboration by the encouragement of sports and collective activities and the improvement of peaceful symbiosis skills by the instruction of toleration of dissident opinions are important roles of informal activities of cantonments in the national education.

**Moore et al.(2020)** showed that prosocial behavior plays an important role in an individuals ability to engage in health promoting behaviors, such as physical activity, despite challenges. According to the theoretical discussion and background presented through sports and extracurricular activities, it is expected to help the student's social behaviors . Accordingly, the present study was designed aiming to examine the effects of sports and extracurricular activities on students' social behaviors were designed.

## **2. METHODOLOGY**

### **2.1 Population**

The present study is a semi- empirical research. So, the procedure of this research is of semi- empirical kind and compares the effect of exercise and extracurricular activities on the social behavior of female guidance students with the one of male guidance students in North Savadkooch city. The statistic population of this research is all of the male and female guidance students of North Savadkooch city that are 740 students.

## 2.2 Sampling Technique

For the purpose of determination of the intended minimum sample size, 254 samples including 120 girls and 134 boys were selected based on Gersi and Morgan Table. The two-stages simple random sampling was applied for the purpose of sampling of the said population. The social skills questionnaires were given to 254 students at the beginning of the academic year as a pre- test. Then, at the end of the semester in the term of April 21 to May 21, the post- test was taken from the same students who have participated in the pre- test and were more active in the extracurricular activities classes.

## 2.3 Instrumentation

For the purpose of collecting data, the questionnaire has been used as following: the Teenage Inventory of Social Skills Questionnaire (TISS, Inderbitzen& Foster, 1992) with five-choice 39 statements has been applied for the purpose of measurement of public health. The content validity of this questionnaire has been confirmed by the professors of the university, too. Also, the validity of this invoice has been reported 0/90 by Inderbitzen and Foster in 1992. Inderbitzen and Foster have evaluated the convergent validity of Inventory of Social Skills Questionnaire by different ways of comparing it with the information of self- evaluating and evaluation of coevals, and society- evaluating data and identified the recognition validity of this questionnaire by surveying the correlation between the scores of social skills and social desirability, economical-social status and the other materials of paper & pencil testing and the obtained results have shown the convergent validity and recognition validity to be acceptable. The reliability of this questionnaire for the eighth- grade female guidance students in Tehran for the affirmative and negative propositions has been reported 0/71 and 0/68, respectively, by Amini in 1999.

The reliability coefficient for the positive and negative segment of this questionnaire by the use of Cronbach's alpha has been obtained 80/71 and 80/51, respectively. Arjmandi (2004); has obtained the reliability of this questionnaire 0/84 by the use of Cronbach's alpha. The reliability of this questionnaire designed by Inderbitzen and Foster, has been 0/72 for the measurement of the negative segment and the internal consistency has been reported 0/88.

Also, for being more assured, Cronbach's alpha test has been applied for measuring the reliability. For this purpose, at first, an early sample including 30 questionnaires was pretested and then, by the use of the obtained data of this questionnaire and SPSS software, the amount of reliability coefficient of these materials was computed by Cronbach's alpha that amounts of which have been presented in table below-.

**Table of coefficients of Cronbach's Alpha**

Cronbach's Alpha	Number of observation	Questionnaire
0/825	30	Social behavior

According to the table related to the coefficients of Cronbach's Alpha, it is observed that Cronbach's Alpha of the said questionnaire has been obtained 0/825. This number expresses that the applied questionnaire enjoys a favorable reliability.

## 2.4 Statistical Analysis

The analysis of data acquired of the present research includes two parts as following:

- (A) Descriptive Statistics: The average central indexes and also divergence indexes such as standard deviation would be applied for better description of data
- (B) Inferential Statistics: For the purpose of testing the hypotheses of research, the data would be analyzed based on Kolmogorov- Smirnov Tests for determining the normal distribution of data and Two- Sample T-Test by the use of SPSS software.

### 3. RESULTS

For the analysis of collected data, at first, the descriptive statistics has been presented that studies the demographical variables of the research such as sex and educational grade. Then, the Kolmogorov- Smirnov Tests and Two- Sample T-Tests have been applied in the inferential statistics. Of total statistic population studied in this research that include all the members of population, for two groups of girls and boys, 120 and 134 members and in total 254 members were respectively selected as research sample that the statistic features of population were presented as following:

#### 3.1 Sex Status of Students

The sex status of the students has been presented in the chart 1. As it is observable, the number of female students is 120 members (%47/24) and the number of male students is 134 members (%52/76).

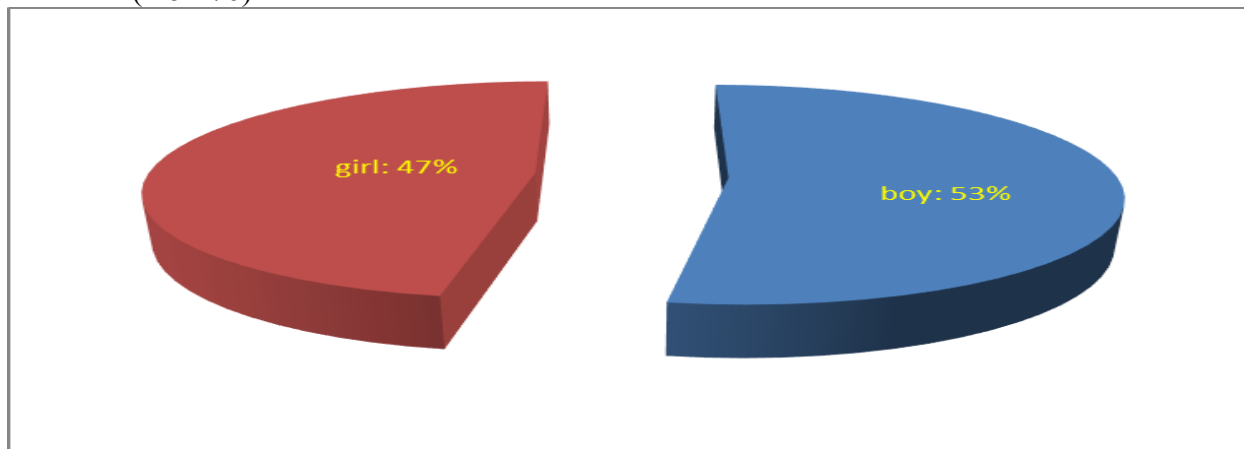


CHART 1: SEX STATUS

#### 3.2. Educational Grade Status of Students

The educational grade status of the students has been presented in chart 2. As it is observable, of total 120 female students, 27 members (%22/50) are educated at seventh- grade, 44 members (%36/67) at eighth- grade and 49 members (%40/83) at ninth- grade.

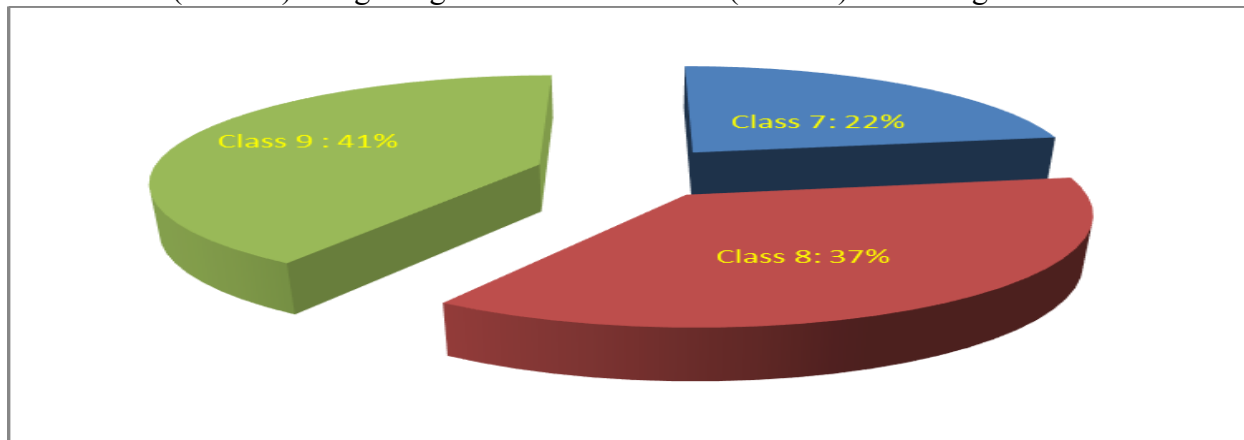


Chart 2: Educational Grade Status of Female Students

#### 3.3 Educational Grade Status of Male Students

The educational grade status of male students has been presented in chart 3. As it is observable, of total 134 male students, 31 members (%23/13) are educated at seventh- grade, 48 members (%35/82) at eighth- grade and 55 members (%41/04) at ninth- grade.

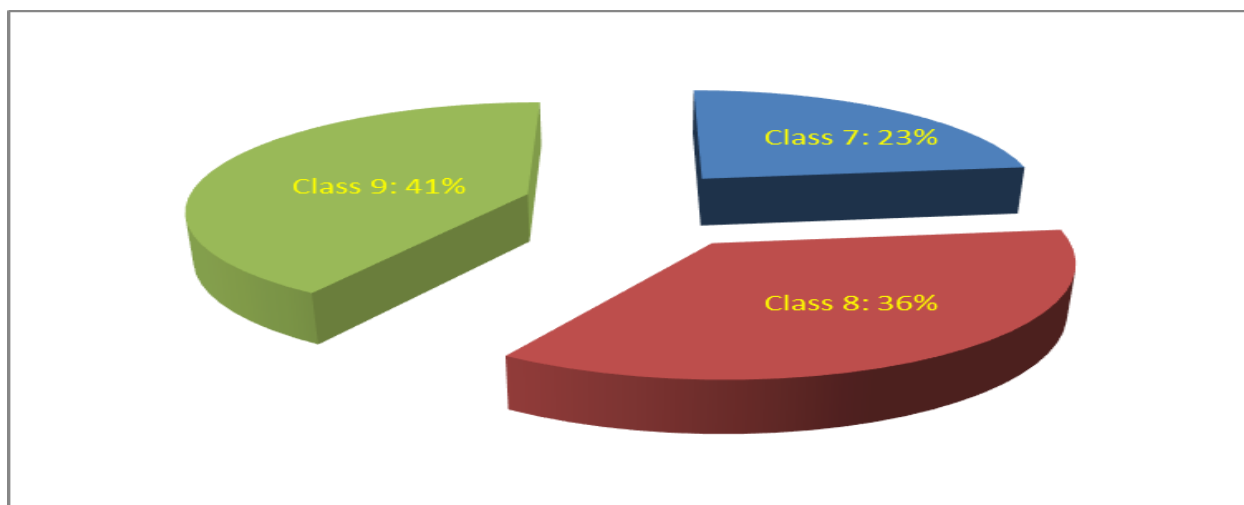


Chart 3: Educational Grade Status of Male Students

### 3.4 Inferential Statistics-Results of Kolmogorov- Smirnov Test

In the inferential analysis of a research, at first, for the specification of this matter that for testing the hypotheses which one of statistic tests (parametric tests" in a situation of being normal" or non-parametric tests" in a situation of being non- normal") should be applied, it is necessary to study the normality of distribution of research variables. The Kolmogorov- Smirnov Test is used for the purpose of identifying the normality or non-normality of the research elements. The hypotheses of the present research are as following:

$H_0$  = The distribution of the intended elewment normal

$H_1$  = The distribution of the intended elewment is not normal

TABLE 1

RESULTS OF KOLMOGOROV- SMIRNOV TEST OF TOTAL SAMPLE POPULATION

Post- test	Pre- test	
254	254	Data Number
2.450	2.116	Average
0.405	0.364	Standard Deviation
0.795	0.854	Kolmogorov-Smirnov Z Ascites
0.437	0.412	Level of Significance

As it is observed, the level of significance of all variables is more than 0/5. So, the result of hypothesis  $H_0$  is accepted. Therefore, the hypothesis of normality of distribution of the related elements in the population is accepted and the parametric dependent T- tests are applied for testing the research hypotheses.

Results of Testing Research Hypotheses

Result of Testing of Main Hypothesis of Research

\* The physical education course and extracurricular activities have a meaningful effect on the social behavior of male and female guidance students of North Savadkooh city.



The independent T-test has been used for the study of this hypothesis. The results related to the descriptive statistics of students' social behavior before and after the test (exercise and extracurricular) has been shown in Table 2.

**TABLE 2**  
**DESCRIPTIVE STATISTICS OF STUDENTS' SOCIAL BEHAVIOR**

Variable		Average	Standard Deviation
Social Behavior	Pre-test	2.116	0.364
	Post-test	2.450	0.405

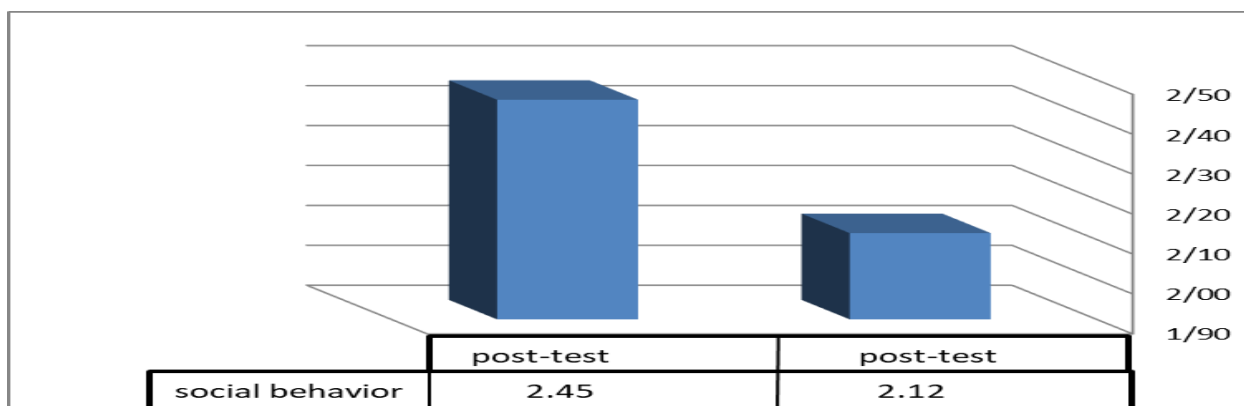


Chart 4: Status of Students' Social Behavior in pre-test and post-test

According to table 2, the average of the status of the students' social behavior after exercising and doing extracurricular activities is more than the average of the status of this variable before exercising and doing extracurricular activities. The dependent T- the test is used for the statistical study of the significance of this difference. Table 3 shows the results obtained by testing the main hypothesis of research.

**TABLE 3**  
**RESULTS OF DEPENDENT T-TEST OF TESTING THE MAIN HYPOTHESIS OF RESEARCH**

Equation of means test			Pairs difference			
Two-sided significance	Degree of freedom	T as cites	Standard error of mean	Standard deviation	Mean difference	
0.000	253	-10.528	0.031	0.505	-0.333	Post- pre

According to the results of the dependent t-test, the level of significance is lower than 0.05 and the hypothesis of the equation of means of two population is rejected. In other words, there is a meaningful difference between the status of the students' social behavior before and after exercising and doing extracurricular activities. With regard to this matter that the mean of students' social behavior after exercising and doing extracurricular activities more than the mean of the intended variable before exercising and doing extracurricular activities. So, the main hypothesis of research has accepted the exercise and extracurricular activities affect the social behavior of male and female guidance students of North Savadkooh city.

#### 4. DISCUSSION

According to the results of present research, in general, the significance of the effect of exercise and extracurricular activities on the improvement of the status of students' social

behavior has been accepted. In other words, the guidance students of North Savadkooh city displayed further ability in social behaviors after exercising and participating in extracurricular activities. Therefore, the exercise and extracurricular activities are more important and effective factors in the social growth of adolescence period that cause the facility and health of growth and social evolution of students. By doing exercise and extracurricular activities, the adolescents obtain opportunities so that they can assemble with their coevals and homogeneous, select a number of friends among them and learn how to communicate with different individuals and keep this communication healthy and continuous and they find these beneficent facilities and opportunities in the extracurricular activities.

According to the results obtained from the findings of the research, the level of significance of paired dependent t- the test is lower than 0.05. The main hypothesis of research has been accepted and the exercise and extracurricular activities are effective in the social behavior of guidance students of North Savadkooh city. The results of present research favor the results of researches of **Hankok and his coworkers (2012)**.

In a research titled Participation of Adolescents and Extracurricular Activities, Effect on Management Skills, they concluded that the perception of adolescents of their management skills is affected by doing extracurricular activities and the support of parents and the other adults. These findings are effective in the future social and scholastic activities, and display the importance of adolescents' management skill at all level of school and also the effect of parents' support on the adolescents' perception of management skills. The teachers should pay attention to the direction of skills by the extracurricular activities. This act provides an opportunity to the apropos development of main skills of adolescents and causes that they put into action what they have learned. According to the findings of the research, the parents' support for the adolescents who participate in the athletic activities or perform a role of leader or caption, is a vital factor in their perception of their leadership skills in the extracurricular athletic, scholastic and social activities. Also, the girls displayed a better perception of their leadership skills in the athletic activities in comparison with the boys. According to this study, the participation in the extracurricular athletic activities among the girls has much effect on their perception of the leadership skills in comparison with the boys. **Bartolom& Papa (2017)** founded that subjects exposed to physical activity exhibit more trust and prosocial behaviors than those who are not exposed.these effects are not temporary. **Lanenbourg (2010)** in a study titled Extracurricular Activities concluded that the extracurricular activities are regarded as a fundamental and vital of education in America. These activities were included as well in the daily program of schools. The social activities, exercise, and all sportive activities have been changed to a part of not only educational values in America but also in the social life. The extracurricular activities balance the educational programs of schools by the encouragement to learning, completion of educational atmosphere, integration of knowledge and actualization of purposes of collective life. So, the physical education teachers should increasingly pay attention to this aspect of the students' growth. **Sobhaninezhad et al. (2008)** also in a study titled Specification of Challenges and Methods of Applying Extracurricular Activities of Schools for National Education of Students, concluded that the extracurricular activities have several positive effects such as the mental and psychical development of individuals, increase of personal responsibility and help the individuals to access to an independent personality, consolidation and unity in the society and pluralism. The participation of students in the management of affairs of cantonments, creation of healthy competition between them, the improvement of spirit of cooperation and collaboration by the encouragement of sports and collective activities and the improvement of peaceful

symbiosis skills by the instruction of toleration of dissident opinions are important roles of informal activities of cantonments in the national education.

## 5. CONCLUSION

We concluded that exercise and the extra program activities are effective on the social behavior of the male and female guidance-school students in Northern Savadkooch. Therefore, regular exercise and the extra program activities as an effective strategy in informal activities of cantonments in the national education is highly recommended.

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