

Research Article

EFFECT OF TRACK AND FIELD ON SOCIAL SKILL AMONG STUDENTS

***Abdi Kamelia**

Department of Physical Education, Shiraz Branch Islamic Azad University, Shiraz, Iran

**Author for Correspondence*

ABSTRACT

Social skills are behaviors enable people to have an appropriate interaction. The purpose of this study was to determine the effect of running on social skill (SS) on students of grade six in elementary schools. Statistical society was six grade elementary students, on four educational areas, Shiraz, Iran. Samples were 80 students, clustered random selected. The research was applicable, quasi experimental, in design of pre-post test. For measuring social skill, a teachers' rating of social skill questionnaire (TRSS) about students was used (Truscott, 1989). It was consists of 39 items. The validity was confirmed with university professors. The Cronbach's alpha was 0.831. The reliability was measured 0.769. The TRSS items were on the Likert scale. The running exercised for 2 sections of 45 minutes per week, during 12 weeks. Data collection occurred after and before running. There is no significant effects on social skill by running among elementary students, was the hypothesis. Descriptive and statistical analysis like Leven test and paired sample t-tests were used. The result $t = -2.05$ and $df = 79$, presented there were significant differences on social skill before and after running ($p < 0.05$). Potentially, it seems running has the significant effect on social skill. Although the hypotheses were approved, results should carefully be interpreted.

Keywords: *Track and Field, Social Skill, Social Competence, Peer Relation*

INTRODUCTION

In physical education talented individual sometimes chooses independently to engage in certain sports. More often this happens due to an initiative from an expert, mostly PE teacher. Besides teaching, PE teachers monitor development of different school children generations, they notice the changes in different segments of their anthropological statuses, they also notice predispositions of individuals who have prediction of a success in the events of track and field, running. Also this directly or indirectly have important role on prevention and cure of diseases. On the other hand track and field like running is the cheap and useful instruments in controlling stress, depression and aggression of present life (2). To get these goals, activities which are recreations and can perform in teams, obviously are effective to everyone. According to the fact, routine track and field activities are the basic requirements in growing ages for school students. Although, the budget and time are inadequate for physical education in schools, using simple and available kinds of activity with minimum facilities is to the point. National educational program in Iran have a total and complete look to human, considering physical and mental aspects. This program consists of 11 learning areas. Attentions to physical, mental and emotional characters of 7 to 12 years old children in elementary schools are in main purposes (8, 20). In these ages, children like to play with friends, cooperate with them, enjoy playing and interested to learn social rules. Different kinds of games and various situations in sport help them to make ready for future (12). Running as based on fundamental skills like jumping, walking, jogging, hopping is a way to increase physical fitness since childhood. Without considering championship, it can be performed in various distances, games and natural facilities. It would inspire through recreational activities and programs. Nowadays coaches and athletes apply it as a complementary in various sports. While more than 20000 people participate in marathon event, more than 90% get the end line.

Social skill means peoples' impression without any harm. It means expressing happiness; appreciation and other behaviors that construct inter personal relations (8). Specialists believed the social skill teaching program has to include all aspects of socialization (7). A study on German adolescents observed lower

Research Article

anxiety and depression scores, as well as less social behavioral inhibition, than their less active peers. The significant relationship between physical activity and self-image also remains after controlling for socioeconomic status (21). Activity in teenagers is significantly related to a favorable self-image (10-12). Study has shown improvements in social skill following running activities. Psychosocial and behavioral changes among girls participating in two developmentally focused youth sport programs were assessed. Girls in grades three to eight participated in ‘Girls on the Run’ and ‘Girls on Track’. The programs resulted in social skill increases, enhanced cooperation (5, 17).

Researchers interestingly found that social skill was associated with the total amount of vigorous activity like running performed by the children. Subsequent analysis of a 55 minutes PE class revealed that only 19 minutes of this time was spent in moderate to vigorous activity and it was suggested that this was sufficient vigorous activity to impact on social skill (5). In 2013, 314 elementary students were evaluated to determine if introducing daily classroom physical activity sessions affected their social skill. Students in the intervention group participated in daily 10-minutes classroom session in addition to their regularly scheduled 80-minutes PE class. Increasing in-school running time by approximately 50 minutes per week, they had better scores (9).

MATERIALS AND METHODS

The study method was applicable, quasi experimental, in design of pre-post test. The independent and dependent variables in respective were running and social skill (SS).

Participant

Statistical society was sixth grade elementary students, on four educational areas, Shiraz, Iran, first term of 1392-93. Random sample were 12 schools in 4 educational areas. A clustered random sample of 80 students in grade six with the age average of 11.5 was used from female elementary schools in Shiraz, Iran.

Procedure

Data collection occurred after and before performing running. The running was exercised in 12 weeks, a 45 minutes section per week. Teachers completed social skill questionnaires about students. Confidentially subject’s information and data was addressed.

Instrument

Social skill was measured using the teachers’ rating of social skill questionnaire (TRSSQ). The TRSSQ consists of 39 items designed to measure social skill. Each of the TRSSQ item is a simple statement that can be answered on a Likert scale (27).

The validity of the TRSSQ was reported between 50-70 (12). Professors suggested about facial and content validity based on these factors: matching with purposes, not suggesting definite answer, not being reverse item, simple, short and comprehensible item style.

The reliability of the TRSSQ was reported 0.65-0.93 (27). In this research 60 students were clustered randomly selected. The TRSSQ were answered by their teachers, the Cronbach’s alpha was 0.831. The Pearson correlation after 10 days on those students was 0.769.

Statistical Analysis

Descriptive statistics was calculated. Paired sample t-test was conducted to examine if running has any significant effects on social skill. $\alpha = 0.05$ was used in all analysis.

RESULTS AND DISCUSSION

Results

The descriptive statistics for students in pre and post test is presented in table 1.

Table 1: The descriptive statistics for students in pre and post tests

	Frequency	Percent	Cumulative percent
Grade 6 in pre test	80	33.3	66.7
Grade 6 in post test	80	33.3	66.7

Research Article

The descriptive statistics for social skill (SS) in pre and post test is presented in table 2.

Table 2: The descriptive statistics for SS in pre and post tests

		Mean	Median	Std. Deviation	Variance
Pair 1	SS in pre test	2.654	2.641	0.376	0.142
	SS in post test	2.681	2.679	0.310	0.097

KS test that is calculated for SS normality in pre and post tests is presented in table 3.

Null hypothesis: The distribution of social skill between students in pre and post tests is normal.

Table 3: KS test for normal estimate of SS pre and post tests

		Kolmogorov-Smirnov Z	Asymp. Sig. (2-tailed)
Pair 1	SS in pre test	0.639	0.808
	SS in post test	0.494	0.968

The SS is normally distributed between students in pre and post tests.

The Leven test for SS variance homogeneity is estimated in table 4.

Null hypothesis: There is no homogeneity between social skill variances in pre and post tests.

Table 4: Leven test of SS

	F	sig
SS	1.902	0.170

It is obvious SS variances after and before running has homogeneity.

The paired sample t-test for SS is shown in table 5.

Null hypothesis: There are no significant effects on social skill by running among students.

Table 5: The paired sample t-test for SS

	t	df	sig
SS in pre test- SS in post test	-2.05	79	< 0.001

Based on $df=79$, $t= -2.05$ in $p \leq 0.05$, null hypothesis is rejected. There were significant differences after and before running. So running had significant effects on SS. In regard to table 2 it has increasing effect on SS.

Discussion and Conclusion

This study wanted to investigate the effect of track and field on social skill among students of elementary schools. Socialization as key help teachers to increase other factors. Sport leads to an increase in self-esteem, confidence, poise and self-assurance (4). Kaufman (2010) demonstrated that sport fosters four dimensions that can be linked to efforts for progressive social change. These dimensions include social consciousness, meritocracy, responsible citizenship and interdependence. Therefore Participation in running activities provides students with one of the truly natural channels for social adjustment and behavior (11). Social teaching does not meet the needs of society in high schools in Iran (28). It is obvious the duty of socialization is an important goal for school teaching. The social output of PE in developing social relations is constructive in all layers of society. The researcher found running had significant effects on SS among elementary students in grade six. Gaining ability and performing various kinds of motions made running interesting more than before. This was supported with the studies mentioned (24-26, 11, 6). The influence of physical activity on self-esteem may be influenced by the activity mode undertaken, although positive cognitive behavioral modifications have been observed across jogging, jumping hopping and aerobics activities (19). In present study, teachers reported students themselves requested for team activities along running training in 9th week.

Research Article

Studies have shown positive effects on SS and physical activity like running (3, 10, 14-18, 21-23, 25) and sports participation (5). In 1999 found that spending more time in PE did have effects on social skill when measured using a standardized test in elementary school. The 2-year follow-up of the PE program in track and field showed pupils in the experimental group did significantly better in social skill when compared to controls (24). Also studies supported the results (1, 14). This study found performing simple and attractive activities such as running in PE class increase socialization. However, the clustered random sampling controlled socioeconomic status but still possible influence of this factor on the observed effects of physical activity cannot be ruled out. It is possible that physical activity may be only a marker for greater levels of SS and may not be a causal factor. It is important to note that socioeconomic status acting as a mediator, may be the major cause.

REFERENCES

1. **Ahamed Y, Macdonald H, Reed K, Naylor PJ and Mckay H (2007)**. School-based physical activity does not compromise children's academic performance. *Medicine and Science in Sports and Exercise* **39** 371-376.
2. **Armstrong T, Bauman AE and Davies J (2010)**. Physical activity patterns of Australian adults: results of the 1999 National physical activity survey. Canberra: Australian institute of health and welfare.
3. **Caterino MC and Polka ED (1999)**. Effects of two types of activity on the performance of second-third and fourth-grade students on a test of concentration. *Perceptual and Motor Skills* **89** 248-254.
4. **Coakley J (2007)**. Sport and character development among adolescents. Paper presented to the Chinese Ministry of Education and the General Administration of Sport, Beijing.
5. **Coe DP (2010)**. Effect of physical education and activity levels on academic achievement in children. *Medicine and Science in Sports and Exercise* **38** 1515-1519.
6. **Debate RD (2010)**. Changes in psychosocial factors and physical activity frequency third-to eighth- grade girls who participated in a developmentally focused youth sport program: a preliminary study. *Journal of School Health* **79** 474-484.
7. **Dwyer T (2001)**. Relation of academic performance to physical activity and fitness in children. *Pediatric Exercise Science* **13** 225-237.
8. **Evans SW, Axelrod JL and Sapia JK (2000)**. Effective school-based mental interventions: Advancing the social skills training paradigm. *Journal of School Health* **70** 191.
9. **Hasslet VB, Null JA, Kempton T and Bukstein OG (1993)**. Social skills and depression in adolescent substance abusers. *Addiction Behavior* **18** 9-8.
10. **Hawkins R and Mulkey LM (2013)**. Athletic investment and academic resilience in a national sample of African American females and males in the middle grades. *Education Urban Society* **38** 62-88.
11. **Kaufman P and Wolff EA (2010)**. Playing and protesting: Sport as a vehicle for social change. *Journal of Sport and Social Issues* 1-22.
12. **Keays JJ and Allison KR (1995)**. The effects of regular moderate to vigorous physical activity on student outcomes: a review. *Canadian Journal of Public Health* **86** 62-66.
13. **Kirkcaldy BD (2002)**. The relationship between physical activity and self-image and problem behavior among adolescents. *Social Psychiatry and Psychiatric Epidemiology* **37** 544-550.
14. **Lieberman LP (2002)**. Letters: Problem solving and social skills training. *Psychiatry Service* **53** 1034-35.
15. **Lee S, Burgeson C, Fulton J and Spain C (2007)**. Physical education and physical activity: results from the school health policies and programs study. *Journal of School Health* **77** 435-463.
16. **Mcnaughten D and Gabbard C (1993)**. Physical exertion and immediate mental performance in sixth-grade children. *Percept Motor Skills* **77** 1155-1159.
17. **Martin K (2010)**. Sport and physical activity enhance children's learning school of population health, the University of Western Australia.
18. **Pate Heath GW and Dowda M (1998)**. Associations between physical activity and other health behaviors in a representative sample of us adolescents. *American Journal of Public Health* **86** 1577-1581.

Research Article

19. **Reed MK (2011)**. Social skills raining to reduce depression in adolescents. *Adolescence* **29** 293-302.
20. **Raudsepp L and Rviira D (2000)**. Sociocultural correlates of physical activity in adolescents. *Pediatric Exercise Science* **12** 51-60
21. **Sandford RA, Armour KM and Warmington PC (2011)**. Re- engaging disaffected youth through physical activity programmes. *British Educational Research Journal* **32** 251-271.
22. **Sallis JF, Mckenzie TL, Kolody B, Lewis M, Marshal S and Rosengard P (1999)**. Effects of health- related physical education on academic achievement: project spark. *Research Quarterly for Exercise and Sport* **70** 127-134.
23. **Shephard RJ (1996)**. Habitual physical activity and academic performance. *Nutrition Reviews* **54** 32-36.
24. **Shephard RJ and Lavallee H (1994)**. Academic skills and required physical education. *Cahper J. Res. Suppl.* **1** 1-12.
25. **Sibley B and Etnier J (2003)**. The relationship between physical activity and cognition in children: a meta- analysis. *Pediatric Exercise Science* **15** 243-253.
26. **Strong WB, Malina RM and Blimkie CR (2005)**. Evidence based activity for school-age youth. *Journal of Pediatric* **146** 732-7.
27. **Tomporowski PD (2003)**. Cognitive and behavioral responses to acute exercise in youths: a review. *Pediatric Exercise Science* **15** 348-359.
28. **Tremblay MS, Inman JW and Willms JD (2000)**. The relationship between physical activity, self-esteem, and academic achievement in 12-year-old children. *Pediatric Exercise Science* **12** 312-323.
29. **Truscott JW (1989)**. A comparison of social skill among second grade children with varying levels of reading achievement, dissertation, Texas Tech University.
30. **Yazdi M (2001)**. M. S. Dissertation, Tehran University, Iran.