

The Effect of Practicing Sport Shows on Improving the Psychological Coordination in Students of the Faculty of Physical Education.

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Abstract

Aim of the research: this research aims at identifying the effect of practicing sport shows on improving the psychological coordination in the students of physical education. The one-group experimental method was used through pre-measurements and post-measurements and the study was conducted on a sample of 120 second year students of the faculty of physical education. Two shows were designed for the opening ceremonies of the 5th Alexandria Universadof 2014. The Suez Canal Panorama, to represent the effort exerted to achieve the national plan for digging the new Suez Canal, and the second show represented the energetic, vivid nature and the physical and mental abilities of the youth and their ability to perform the coordinated exercises in alternate consecutive periods of light and darkness. The main results were:

- Sport shows have a significant positive effect on improving the level of the general psychological coordination (personal – social) in the second year students in the faculty of physical education for boys.
- There is a positive relationship between practicing sport shows and the improvement of psychological coordination with a positive effect on the level of performance in sport shows

Recommendations

In the light of the research procedures, the researcher made the following recommendations:

- Developing psychological educational training courses to improve the level of sport shows trainers in sporting institutions and providing physical and human resources, in view of the important role they play.
- When designing sport shows, appropriate exercises should be directed and standardized in order to be compatible with the motor abilities of participants and the aim of the show.
- Participating in sport shows as they help improve the general psychological coordination.
- Organizing sport shows for participation in all important events..

Introduction:

Youth is a very important stage in man's life. During it, youth acquires physical, mental, psychological and social skills required for their psychological and social development so that they can regulate their relationships with themselves, with others and with the real life around them (6: 8).

Life always presents man with problems that might cause him some annoyance, worry and anxiety. Although man can solve the problems, sometimes he is unable to solve them, which will consequently affect his daily life, and his coordination with himself and with the society around him (7:394).

As a result, psychological coordination is a goal which man seeks to achieve. Coordination aims at achieving self-satisfaction and re-assuredness as a result of feeling one's personal ability to adapt to the environment and interact with others (18: 384). The greater part of coordination is achieved by sensory perception performed by man about

himself or herself. In this respect, the idea formed by a person about himself or herself may reflect the actual situation and make him accept the reality, especially the painful part in it. (28: 34)

Coordination therefore is a state of compatibility and harmony between man and environment, reflected in his ability to satisfy his needs through changing his behavior and habits when encountered by a new situation. Mal-coordination appears when man is unable to solve his everyday problems, contrary to what others expect him to do or what he expects he would do. (37:334) (11: 56)

There are two types of psychological coordination: personal coordination and social coordination. Personal coordination means that a person is satisfied with himself, does not hate himself or feeling angry with himself, and that his psychological life bears no worries or psychological struggles. In addition, the person is able to coordinate between motives and struggles in order to achieve a state of balanced satisfaction, and solve psychological conflicts in a positive manner instead of avoiding them (16:62), (58:18),(31: 14).

Social coordination means man's ability to make social relationships that are cooperative and tolerant unstained by aggression, suspicion or non-consideration of others' feelings (6:32), relationships that are free from collisions, conflicts, feeling oppressed or showing signs of aggression or dominance. This conforms with what is called emotional maturity (28:18), thus ensuring being happy with others and committed to the society's ethics, and coping with standards and social control rules besides accepting change and working for the good of the community (50:25).

Sport shows have recently become an independent, specialized field of its own that express the image of the society and its cultural, educational, scientific and artistic levels (20:119), (40:1). They have become very important in opening international and world championships and tournaments, as displayed in opening the Olympics, African nations championships, Mediterranean tournaments and youth festivals.

Sport shows reflect the progress of nations in management, organization and sport. They also represent their sport culture and are a good measurement of the validity of political, social and economic systems and are closely related to the achievement of the national goals and society's attitudes (25:75).

In addition, sport shows help both the participant and the audience think and express himself, and they also show nations scientific and economic advancement and their powers and physical and human potentials (4:100).

They consist of a set of collective physical movements that are related harmonious and coordinated in performance and timing according to educational principles and foundations. They may be free shows or shows with tools accompanied by music according to the event for which they are created (2 :275) (12:649)(33:5).

Opening the Fifth Egyptian Universities Olympics of 2014, organized in Alexandria, was a very important festival given due consideration by the state to reflect the care given by the state to the youth and the encouragement to practice sports. The idea of conducting this study occurred to the researcher when he was assigned the job of designing, implementing and directing a sport show for the occasion. He noticed that the students of the second year who were asked to take part in the task showed fear and anxiety because they had no previous experience in participating by sport shows. The task was all the more difficult for them on learning that the Faculty had already participated in previous shows on the occasion of opening Olympics in 2008, 2009 and 2012 and made a great success hailed by everyone including ministers, university

presidents, faculty deans and specialized faculty staff members working in the field of sport shows. This was enough reason for people responsible for organizing the championship to ask for the event to be held in Alexandria in 2014.

Since sport shows help the person acquire several social values and relationships through the feeling of being excellent and distinguished because of his or her ability to offer a distinguished performance and especially so when he or she feels appreciated by others, which will have an effect on the formation of a person's character and his adaptation (56:34). Contrary to that, struggles, frustration and other aspects of the social environments are psychological results of the biological disorders suffered by the individual. Psychological health is therefore reflected in a condition in which a person is in a state of psychological, personal, emotional and social coordination with himself, with his environment and with others (57:459).

This shows the importance of this research on the effect of practicing sport shows on improving the psychological coordination as related to the performance level of university students because psychological coordination is a state of harmony between a person and his or her environment.

Objective of the Research

Identifying the effect of practicing sport shows on improving psychological coordination in the students of the second year in the Faculty of Physical Education.

Research Hypotheses

- There are statistically significant differences between pre-measurements and post-measurements in the experimental group in measuring the psychological coordination favoring post-measurements;
- There are statistically significant differences between pre-measurements and post-measurements in the experimental group in performance level of the sport show favoring post-measurements;
- There is a relationship between practicing sport shows and psychological coordination that affects the performance level in sport shows.

Research Procedures

- **Geographical Scope:**

Courts of the Faculty of Physical Education for Boys, Alexandria University in the period from 4/8/2014 to

- **Time Scope:**

21/9/2014, and Al-Salam Olympic Court of Sport Games in the Armed Forces Complex in Semouha, Alexandria in the period from 22/9/2014 to the opening day of 25/9/2014.

Table 1:
Time Distribution of Conducting the Pilot and Basic Studies

The Study	Date	
	From	To
Pilot studies	4/8/2014	9/8/2014
Pre-measurements of the physical variables and the psychological coordination scale	10/8/2014	11/8/2014
Pre-measurements to evaluate the performance level in the sport show	30/8/2014	
The basic study	12/8/2014	25/9/2014
Post-measurements	26/9/2014	

- **Human Scope:**

Second year students of the Faculty of Physical Education for Boys, Alexandria University were chosen in the simple random manner and the study was conducted on 120 students representing 30.61% from the original community.

- **Research Method:**

The experimental method was used, being suitable for this type of study, and the one group experimental design was used.

- **Research Samples:**

Pilot Study Sample:

20 students of the second year students of the Faculty of Physical Education, Alexandria University, were chosen outside the basic sample, to conduct the pilot studies.

Basic Study Sample:

The basic study was conducted on a homogenous random sample (L 120) of the second year students of the Faculty of Physical Education, Alexandria University.

- **The Tests Used (Psychological and Physical):**

The Psychological Coordination Scale

This scale was designed by Sameera Shend (1983) (43), to measure the psychological coordination in university students to study the relationship between the care pattern and psychological coordination and the relationship between family depreciation and psychological coordination. No specific time is assigned to take this measurement. The scale consists of 60 statements divided

into 6 elements, with each element containing 10 statements as follows:

- a. Personal coordination: this includes self-confidence, the feeling of belonging, being free from neurological symptoms;
- b. Social coordination: this includes healthy social relationships, being free from aggressive tendencies, moral commitment.

Physical Tests

- Test of pull-up and strength of right and left fist to measure muscular strength (47), (21);
- Test of broad jump from standing and pushing a 3 kgm medical ball with the right and left arm to measure muscular power (47), (21);
- Test of running in place for 15 seconds to measure motor speed (21);
- Test of the ruler for the right arm and the left arm to measure reaction speed (47), (21);
- Test of standing with the instep on a cube to measure stable balance (21);
- Test of walking on the balance beam to measure motor balance (34);
- Test of numbered circles and rope-jumping to recoil to measure coordination (21);
- Test of zigzag running between hurdles and burpee from standing for 10 seconds to measure (47), (21) ;

- Scientific co-efficients of the psychological coordination scale (personal-social), and the physical tests studied:

The discrimination validity was chosen to ensure the validity of psychological measurements. The validity co-efficient was calculated by comparing a distinguished group with a non-distinguished group of a sample of 20 students, and calculated the T value as shown in table 2.

1. Validity co-efficient:

Table 2

The Statistical Significance of the Psychological coordination scale (personal-social) by comparing the distinguished group with the non-distinguished group

Statistical significance axes			Distinguished group (n = 10)		Non-distinguished group (n = 10)		Difference between means	The calculated T value	Validity co-efficient
			Mean	± standard deviation	Mean	± standard deviation			
Psychological coordination scale	Personal coordination	Self-confidence	9.30	0.48	15.20	0.42	5.90-	**29.10	*0.99
		The feeling of belonging	8.40	0.84	16.40	0.70	8.00-	*23.09	*0.98
		Being free from neurological symptoms	9.30	0.48	17.40	0.70	8.10-	*30.14	*0.99
		The total of personal coordination	26.60	1.07	48.60	0.97	22.00-	*48.14	*0.99
	Social coordination	Healthy social relationships	8.60	0.84	14.60	0.84	6.00-	*15.91	*0.97
		Being free from aggressive tendencies	7.60	0.97	15.50	0.71	7.90-	*20.87	*0.98
		Moral commitment	9.50	0.71	17.70	0.82	8.20-	*23.89	*0.98
		Total of social coordination	24.60	0.70	46.90	1.52	22.30-	*42.06	*0.99
	Total of psychological coordination		52.00	2.05	83.00	2.21	31.00-	*32.48	*0.99

The tabular T value at the level of 0.05 = 1.734

Table 2 shows statistically significant differences between the distinguished group and the non-distinguished group in the psychological coordination skill (personal-social) studied, and a rise in validity co-efficient.

2. Reliability co-efficient:

The reliability of tests was calculated by re-testing. The chosen tests were applied to a sample of 10 students as a first measurement, then were re-applied to the sample one week later, and the co-efficient of correlation “R” was calculated to find the reliability co-efficient of the tests as shown in table 3.

Table 3

Co-efficient of Correlation between the First and Second Applications of the Psychological Coordination Scale (Personal-Social) to Determine the Reliability Co-efficient N = 10

Statistical significance Axes			First application		Second application		Difference between the two means		The value of T	Correlation co-efficient
			Mean	± standard deviation	Mean	± standard deviation	Mean of differences	±Deviation of differences		
Psychological coordination scale	Personal coordination	Self-confidence	9.30	0.48	9.35	0.47	0.05-	0.16	0.98	*0.95
		The feeling of belonging	8.36	0.88	8.40	0.84	0.04-	0.14	1.00	*0.99
		Being free from neurological symptoms	9.36	0.60	9.30	0.48	0.06	0.18	1.00	*0.96
		The total of personal coordination	26.65	1.06	26.60	1.07	0.05	0.16	0.99	*0.99
	Social coordination	Healthy social relationships	8.56	0.83	8.60	0.84	0.04-	0.14	0.99	*0.99
		Being free from aggressive	7.67	0.94	7.60	0.97	0.07	0.21	1.00	*0.98

Statistical significance	Axes	First application		Second application		Difference between the two means		The value of T	Correlation co-efficient
		Mean	± standard deviation	Mean	± standard deviation	Mean of differences	±Deviation of differences		
	tendencies								
	Moral commitment	9.46	0.61	9.50	0.71	0.04-	0.14	0.98	*0.99
	Total of social coordination	24.65	0.67	24.60	0.70	0.05	0.16	0.98	*0.97
	Total of psychological coordination	51.95	2.11	52.00	2.05	0.05-	0.16	0.97	*0.99

* The tabular T value at the level of 0.05 = 2.262 * The tabular (R) value at the level of 0.05 = 0.497.

Table 3 on the differences between the first and second applications in the psychological coordination scale (personal-social) to find the reliability co-efficient shows that there are no statistically significant differences between the two applications. The calculated T value ranged between 0.97 and 1.00, which are lower than the tabular T value at the level of 0.05 = 2.262. The reliability co-efficient value ranged between 0.95 and 0.99, which are higher than the tabular R value at the level of 0.05 =

0.497, thus proving that the psychological coordination scale (personal-social) is reliable and gives the same results if re-applied to the same sample in the same conditions.

The internal consistency co-efficient of the statements of the psychological coordination scale (personal-social), the grand total of each axis, and the Alpha Cronbach were verified to find their reliability, as shown in table 4.

Table 4

Internal Consistency Validity (Co-efficient of Correlation of the Statement with the Grand Total of Each Axis under which it Occurs) and the Alpha Cronbach Co-efficient of the Psychological Coordination (Personal-Social) Axes to Find Reliability N = 10

Statistical significance	axes	Internal consistency co-efficient	Alpha Cronbach co-efficient	
			For factors	For the scale
	Self-confidence	**0.813	**0.810	**0.985
	The feeling of belonging	**0.872	**0.907	
	Being free from neurological symptoms	**0.890	**0.890	
	Healthy social relationships	**0.904	**0.815	
	Being free from aggressive tendencies	**0.905	**0.928	
	Moral commitment	**0.945	**0.843	

** The tabular (R) value at the level of 0.05 = 0.497

Table 4 on the internal consistency co-efficient (the co-efficient of correlation of the statement with the grand total of the axis under which it occurs) of the scale axes as a whole, shows a rise in the internal consistency co-efficient which ranged between 0.813 and 0.945, which are significant values at the level of 0.05, thus proving the validity of the statistical significance of the scale axes and the fact that the axes are closely related to the scale, and

that they measure what the scale was designed to measure, thus they contribute to designing the scale and measure what they were set to measure. The Alpha Cronbach co-efficient of the axes varied between 0.810 and 0.928 and the whole scale was 0.985 which is significant at the level of 0.05, thus proving the reliability of axes because the Alpha Cronbach co-efficient is higher than 0.6.

- **Homogeneity of the Sample**

Table 5
The Statistical Significances of the Basic and Physical Variables of the Total Research Sample before Experiment

Statistical significance			Unit	N = 120					
				Mean	± standard deviation	Skewedness	Kurtosis	Difference co-efficient %	
Variables									
Basic variables	Age		Year	18.22	0.58	1.25	1.86	%3.18	
	Height		Cm	177.20	4.42	0.50-	0.73-	%2.50	
	Weight		Kgm	70.63	5.22	0.63	1.65	%7.38	
Physical variables	Muscular strength	pull-up		Number	6.20	0.42	0.14	0.86	%6.82
		Fist strength	Right	Kgm	35.35	4.22	2.15	2.40	%11.92
			Left	Kgm	33.62	3.43	1.21	1.92	%10.21
	Muscular power	Broad jump from standing		Cm	176.83	9.40	0.41-	0.29-	%5.32
		Pushing a 3 kgm medical ball	With the right arm	M	8.51	0.95	0.95	1.21	%11.21
			With the left arm	M	6.82	0.73	0.86	1.12	%10.72
	Speed	Running in place for 15 seconds		Number	29.75	3.21	0.16	0.46	%10.77
	Reaction speed	Ruler test of the right arm		Cm	23.53	3.01	0.85	1.95	%12.80
		Ruler test of the left arm		Cm	22.94	3.55	0.69	1.83	%15.46
	Balance	Stable	Standing with the in-step on a cube	Second	5.24	0.94	0.45	0.98	%17.98
		Motor	Walking on the balance beam	Second	9.50	0.73	0.70	1.04	%7.72
	Coordination	Numbered circles		Second	9.59	1.50	1.02	1.40	%15.66
		Rope jump to recoil		Number	2.30	0.30	0.83	1.22	%13.20
	Agility	Zigzag running between hurdles		Figure	29.53	1.25	0.58	0.20-	%4.25
		Burpee from standing for 10 seconds		Number	5.01	0.96	0.24	0.85	%19.05

Table 5 shows that the skewedness co-efficient values range between -0.50 and 2.15 and that the kurtosis co-efficient values fall between -0.73 and 2.40. Thus these values fall at ± 3 , thus proving that the sample is free from defects of non-normal distributions. All the values of

difference co-efficients of the basic and physical variables of the total sample studied fall between 2.50% and 19.05% which is 20% below the mean, thus proving the homogeneity of the research subjects in all variables studied.

Table 6
Statistical Significance of the Psychological Coordination (Personal-Social) of the Total Research Sample before the Experiment

Statistical Significance			Axes	N = 120				
				Mean	±standard deviation	Skewedness	Kurtosis	Co-efficient of difference %
Psychological coordination scale	Personal coordination	Self-confidence		9.05	0.32	2.53	1.73	%3.49
		The feeling of belonging		8.13	0.40	1.36	1.70	%4.98
		Being free from neurological symptoms		9.13	0.33	1.65	1.91	%3.67
		The total of personal coordination		26.23	0.62	0.93	1.12-	%2.36
	Social coordination	Healthy social relationships		8.20	0.46	1.60	2.80	%5.66
		Being free from aggressive tendencies		7.40	0.74	0.49	0.98	%10.06
		Moral commitment		9.25	0.44	1.05	0.45	%4.74
		Total of social coordination		24.28	0.64	1.91	1.21	%2.64

	Total of psychological coordination	50.50	1.52	1.05	0.45-	%3.01
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Table 6 shows that the skewedness co-efficient values range between -0.49 and 2.53 and that the kurtosis co-efficient values fall between -1.12 and 2.80. Thus these values fall at ± 3 , thus proving that the sample is free from defects of non-normal distributions. All the values of difference co-efficients of the psychological coordination scale (personal-social) of the total sample studied fall between 2.36% and 10.06% which is 20% below the mean, thus proving the homogeneity of the research subjects in psychological coordination (personal-social) studied.

- **The Basic Experiment:**

- **The Training Program:**

- The basic experiment of the basic study was conducted in the period from 12/8/2014 to 25/9/2014 as follows:
- In the first week, the research group learned the exercises and applied the movements and formations of the show;
- The periodic training (of low and high intensity) for 7 weeks at the rate of 2 training units every day from 9 am to 1 pm and from 6 pm to 10 pm in the evening every day, thus assigning 4 hours for each training learning unit through the week with 2 days for rest every week;
- The number of the training-learning units of the show were 64 in number equivalent to 256 training/learning hours;
- The principle of load and rest was used as a basis for the training;
- The time average of performing each formation was 45 seconds;
- The time average of rest between each formation and the following one varied between 60 seconds and 120 seconds;
- The time average of rest between performing the formations of the training unit varied between 5 minutes and 10 minutes;
- The time average of the rest between performing the whole show and re-performing it varied between 15 minutes and 20 minutes;
- Time of the show was 15 minutes;

- The average time of rest was calculated after return-to-normal pulse rate from 120 to 130 beat/minute.

- **Evaluating the Sport Show**

The show was evaluated by a panel of faculty staff members at the exercises and gymnastics training department of the Faculty of Physical Education for Boys, Alexandria University, made up of 5 specialized referees in order to evaluate the performance level in the sport show using the Evaluation Items Form.

Content of the Sport Show

I. Show Design:

The following points were taken into consideration: diversity and originality of exercises, ease of transition from one formation to another, going from high – medium – low levels, the ability of the students to perform the exercises, exercises should involve all the body parts.

II. Theme of the Show

- **The first show:** Suez Canal Panorama: This show represents the efforts exerted to achieve the national plan to dig the New Suez Canal.
- **The second show:** This show represents the activity, energy and the physical and mental ability of the youth, besides their ability to perform the coordinated exercises at a high level under alternate consecutive periods of light and darkness.

III. Tools

- **The first show:** objects representing 4 ships, 1 digging bulldozer, 1 heavy truck, digging tools and 15 blue chiffon blankets and 18 yellow chiffon blankets.
- **The second show:** 1280 illuminated sticks were used during the opening. 4 sticks were fixed to each forearm, and 4 were fixed to each upper arm, so that each person would carry 8 sticks in each arm, i.e. 16 for the two arms for more lighting. 1280 other sticks were used during the training.

IV. Costumes:

- **The first show:** 20 yellow overalls, 20 blue overalls and 40 black shoes.

- **The second show:** The eagle in the flag of Egypt was drawn on trousers and T-shirts.
- 40 trousers and T-shirts white in front and black in the back, 40 trousers and T-shirts red in front and black in the back.
- 80 black shoes, 80 white socks and 80 white gloves.

V. Show Components:

- The first show contained a panorama representing work in the New Suez Canal.

Statistical Treatments:

The statistical treatment was conducted by using the SPSS software to analyze results in order to find:

- Mean;
- Kurtosis co-efficient;
- Validity co-efficient;
- The T test of differences between two groups;
- Standard deviation;
- Difference co-efficient;
- reliability co-efficient;
- The T test of differences between two measurements;
- Skewedness co-efficient;
- Correlation co-efficient;
- The percentage.
- Alpha Cronbach co-efficient;

- The second show contained entering, 15 formations and exit.

VI. Music:

- A specialized music composer was hired to compose the show music.

VII. Lighting:

- Lighting was distributed over each formation of the first and second shows using a program prepared by the lighting engineer to display the illuminated sticks in the dark.

Result Presentation and Discussion:**I. Result Presentation:**

Table 7

Statistical Significance of Scores Given by Judges to Evaluate the Sport Shows Studied in the Experimental Group in the Pre-measurement and the Post-measurement

Statistical significance	Unit	Pre-measurement		Post-measurement		Difference between the two means		The T paired value	Improvement percentage %
		Mean	± standard deviation	Mean	± standard deviation	Mean of differences	±Deviation of differences		
Form items	Score	6.20	0.45	9.60	0.55	3.40-	0.89	*8.50	%54.84
Idea and theme of the show		3.40	0.55	4.60	0.55	1.20-	0.45	*6.00	%35.29
Preparation and entering the show ground		3.30	0.67	4.80	0.45	1.50-	0.50	*6.71	%45.45
Show time		6.40	0.55	9.68	0.43	3.28-	0.65	*11.36	%51.25
Formations and sub-formations		9.20	0.45	14.60	0.55	5.40-	0.55	*22.05	%58.70
Costumes		9.40	0.89	14.10	0.74	4.70-	1.48	*7.09	%50.00
Tools		9.80	0.45	14.20	0.84	4.40-	0.55	*17.96	%44.90
Musical accompaniment		4.90	0.89	9.90	0.22	5.00-	0.71	*15.81	%102.04
The standard of the artistic material of the show items and the movement groups designed		5.40	0.55	9.50	0.50	4.10-	1.02	*8.95	%75.93
Originality and super performance and difficulty		3.20	0.45	4.80	0.27	1.60-	0.42	*8.55	%50.00
Exiting the ground show		61.20	2.59	95.78	1.32	34.58-	2.31	*33.49	%56.50
Total									

The tabular T value at the level of 0.05 = 2.778

Table 7 and diagram 1 on the statistical significance of scores given by judges to evaluate the sport shows studied in the experimental group in the pre-measurement and the post-measurement show that there are statistically significant differences in the means of scores given by judges of the sport shows. The scores improved after the

experiment in all means of evaluation scores given by judges of the sport shows, with statistically significant differences at the level of 0.05 and the T value varied between 6.00 and 33.49 with improvement percentages between 35.29% and 102.04%.

Figure 1:

The arithmetic means of the evaluation items given by judges of the sport show studied in the experimental group in the pre-measurement and post-measurement

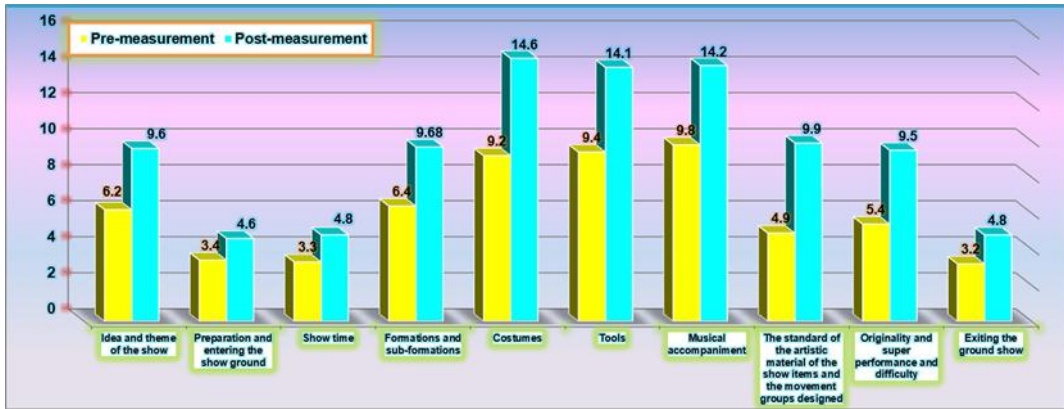


Table 8:

Statistical significance of psychological coordination scale (personal-social) studied in the experimental group in the pre-measurement and post-measurement N = 120

Statistical Significance		Pre-measurement		Post-measurement		Difference between the two means		The T paired value	Improvement percentage %	
		Mean	± standard deviation	Mean	± standard deviation	Mean of differences	±Deviation of differences			
Axes										
Psychological coordination scale	Personal coordination	Self-confidence	9.05	0.32	14.93	0.27	5.88-	0.33	*110.94	%64.92
		The feeling of belonging	8.13	0.40	16.00	0.23	7.88-	0.46	*107.48	%96.92
		Being free from neurological symptoms	9.13	0.33	17.18	0.50	8.05-	0.50	*101.05	%88.22
		The total of personal coordination	26.23	0.62	48.18	0.59	21.95-	0.81	*170.35	%83.70
	Social coordination	Healthy social relationships	8.20	0.46	14.38	0.63	6.18-	0.68	*57.85	%75.30
		Being free from aggressive tendencies	7.40	0.74	15.35	1.00	7.95-	1.01	*49.71	%107.43
		Moral commitment	9.25	0.44	17.20	0.56	7.95-	0.55	*91.02	%85.95
		Total of social coordination	24.28	0.64	46.43	1.13	22.15-	1.31	*106.80	%91.25
	Total of psychological coordination			1.52	94.45	0.81	43.95-	1.71	*162.65	%87.03

The tabular T value at the level of 0.05 = 1.984

Table 8 and diagram 2 on Statistical significance of psychological coordination scale (personal-social) studied in the experimental group in the pre-measurement and post-measurement show that there are statistically significant differences in the means of the psychological coordination scale (personal-social).

The scores improved after the experiment in all means of scores given to the psychological coordination scale (personal-social) with statistically significant differences at the level of 0.05 as the T value varied between 49.71 and 170.35, with improvement percentages between 64.92% and 107.43%.

Figure 2:

arithmetic means of the psychological coordination scale (personal-social) studied in the experimental group in the pre-

measurement and post-measurement

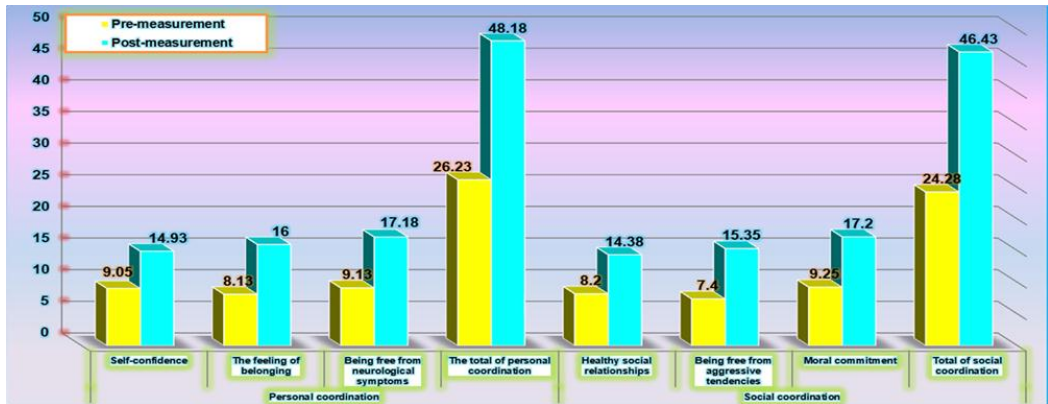


Table 9

Coefficient of correlation between scores given by judges in evaluation of the performance level in the sport shows and the psychological coordination scale (personal – social)

The scale Item of evaluation	and the psychological coordination scale (personal – social)								Total of psychological coordination
	Personal coordination				Social coordination				
	Self confidence	Feeling of belonging	Being free from neurological symptoms	Total of personal coordination	Healthy social relationships	Being free from aggressive tendencies	Moral commitment	Total of social coordination	
Idea and theme of the show	**0.955	**0.973	**0.950	**0.967	**0.982	**0.938	**0.970	**0.966	**0.970
Preparation and entering the show ground	**0.798	*0.759	**0.799	*0.764	*0.713	**0.779	*0.764	*0.744	**0.776
Show time	**0.853	**0.819	**0.823	**0.812	**0.779	**0.833	**0.807	**0.839	**0.830
Formations and sub-formations	**0.975	**0.958	**0.967	**0.959	**0.932	**0.961	**0.953	**0.962	**0.966
Costumes	**0.977	**0.980	**0.990	**0.989	**0.971	**0.977	**0.978	**0.975	**0.983
Tools	**0.944	**0.953	**0.941	**0.956	0**0.950	**0.946	**0.942	**0.957	**0.952
Musical accompaniment	**0.963	**0.976	**0.941	**0.957	**0.956	**0.980	**0.973	**0.976	**0.965
The standard of the artistic material of the show items and the movement groups designed	**0.975	**0.970	**0.969	**0.970	**0.955	**0.963	**0.964	**0.971	**0.974
Originality and super performance and difficulty	**0.970	**0.966	**0.970	**0.976	**0.963	**0.952	**0.953	**0.975	**0.973
Exiting the ground show	**0.931	**0.915	**0.932	**0.919	**0.889	**0.918	**0.915	**0.907	**0.924
Total	**0.993	**0.991	**0.988	**0.991	**0.977	**0.986	**0.985	**0.992	**0.994

**The tabular R value at the level of 0.05 = 0.497

Table 9 on Coefficients of correlation between scores given by judges in evaluation of the performance level in the sport shows and the psychological coordination scale (personal – social) shows that there are statistically significant differences between the scores given by judges in evaluation of the performance level in the sport shows and the psychological coordination scale (personal – social). Values of the correlation coefficients varied between 0.713 and 0.994, which are higher than the

tabular R value at the level of 0.05 (= 0.497), thus proving high correlation coefficients.

Discussion of results

The statistically significant differences between the pre-measurement and the post-measurement of the psychological coordination scale in its main dimensions (personal coordination, social coordination) and its sub-dimensions (self-confidence, the feeling of belonging, being free from neurological symptoms) of personal coordination, (healthy social relationships, being free from aggressive tendencies, moral commitment) of social coordination, favoring post-measurements can be attributed to the effectiveness of the applied training/learning program which led to improving the psychological coordination. In this respect, Osama Rateb (1995) and Mohammed Allawy (1998) agreed that the more the social and personal interaction between the community members, the faster they can perform their different roles within the community and in a more positive manner to contribute to the achievement of the community's goals (42:390-391) (13:191-192).

Sport shows contribute to building up personality and appreciating motor beauty is an artistic issue just like appreciating music and literature, and it can be developed through the coordination between colors, costumes, tools and the backgrounds (46:2).

The training period created opportunities for the students to participate in a homogeneous work within the group, and the camp period increased the relationship between students and helped develop a spirit of plurality, thus leading to developing the mutual confidence and the ability to express themselves. The presence of the university president, the faculty dean and vice-deans in some training periods increased the students' self-confidence and moral commitment especially when they felt appreciated which led them proud of what they did.

Acquiring any educational experience through a social situation is very important in the integrated educational process and the personal and social growth of the student (51:201). Successful educational experiences largely depend on the principles of kinetic and social interaction between members of the community and also on the appropriate psychological atmosphere (10:87), (27:45), (44:319).

The high level of the students chosen for the research sample helped the community to become coherent. In this respect, Mohammed Allawy (1992) and Lotfy Taha (1995) agreed that the appropriateness of the psychological atmosphere of the member within the community help the community to be stable, internally coherent and free from aggressive tendencies (30:317), (5:16).

The program applied through the camp also led to improving the psychological coordination through bearing one's responsibility, decision making, and feeling of self-importance, in addition to developing the social bonds. The different social and psychological situations are the applied field of the social and psychological behavior, because the community is not just a geographical grouping of individuals, but a general framework representing the type of different interactions and social relationships. This shows how far an individual affects and is affected by such relationships and interactions (39:209), (14:43), (2:261).

A high level of physical efficiency does not necessarily lead to a high level of performance. In this respect, Ayman Al-Mohammady (2001) states that low self-confidence can have a negative effect on a person's coordination because it makes him or her restricted in personal behavior and social interactions so that his or her performance would be lower than his or her level of abilities and inclined to avoid new experiences and situations and anxious to normal situations. The feeling of inferiority makes him or her unable to evaluate situations correctly (9 :53).

Ilham Abd El-Azeem (2002) adds that self-confidence helps an individual to adapt himself to changes around him and modifies his or her behavior (46:29). In this respect, Miller (1995) states that psychological coordination is closely related to self-confidence which in turn affects the relationship between and those around him affecting or affected by him. There are also attributes that do not grow without self-confidence such as bearing the personal and social responsibility (19:316).

Encouraging a person to make the correct responses develops self-confidence and helps him or her acquire the social interaction skills (3:53). This conforms with results reached by Matheon (1991), Kolt (1994) and Ilham Abd El-Azeem (2002) (15:1099), (46:36).

The statistically significant differences between pre-measurements and post-measurements in the experimental group in the performance level of the sport show, favoring post-measurements is attributed to the nature of the training/learning program applied, because the regular training and the repetition of motor performance in the exercises of the two shows led to improving the students' performance level of the shows.

The improvement in the students' performance level is attributed to the nature of the suggested training program which includes standardized intensity and load in training for the sport shows. This conforms with results reached by Salah Kadoos (1993) and Azmy Abd El-Khalek (2015), stating that the standardized training which is based on a

sound scientific foundation would improve the players physical and motor abilities and help them do the special tasks effectively and efficiently (1:17), (32:95). This conforms with results reached by Omayma Anwar 1990, El Sayed Esa 1995, Osama Abdel Rahman 1999 and Hebatullah Mahmoud 2004, stressing the effectiveness of continuous training while gradually upgrading levels, thus leading to improvement of the performance level (29:135), (53:74), (26:121), (45: 124).

In this respect, Wilmore & Costill 1994, Esam Amin & Mohamed Bereqaa 1997 and Moritani 1999 agreed that the physical training involving standardized loads exercises lead to improvement in the performance results. This is because the aim of the training is clear and the special tasks are specified, this is known as transfer of the positive effect of the training (38: 269), (54:74), (36: 254).

The use of tools in training aims at improving the physical and skillful levels (40 : 27), which conforms with statements by Abdel Monem Borhom Mohamed Abu Nemra 1995, Ateyat Khattab 1997, Makarem Helmy et al. 2000 and Ahmed El Shazly & Yousef Bo Abbas 2001 who suggest that physical exercises using tools are very important to improving the sporting level, as they help the process of physical and psychological development to make a person ready to exert more effort and increase enthusiasm, and also to create a cheerful atmosphere, increasing suspense and excitement (24: 25-26), (48: 23-25), (23: 54), (49 : 14-15). In addition, they greatly contribute to the development of muscular-nervous coordination. They develop the feeling of movement and rhythm thus helping a player to master the movement and perform accurately, which conforms with results reached by Amr Basyouni 1995, Alaa Soleiman 1996, Mahmoud Maree 1997, Ibrahim Fathy 2004 (17), (55), (8), (52).

The above results show that there is a positive relationship between practicing and participating in sport shows and the improvement of psychological coordination, with a positive effect on the performance level in sport shows. This is in line with results reached by most of the previous psychological studies which emphasized the importance of practicing exercises to improve the general psychological coordination (41: 43), (35: 134), (22: 96)

Conclusions

In the light of the objective of the research, the research procedures and results of the statistical treatments of the data, the following conclusions were made:

- Sport shows have a significant positive effect on improving the level of the general psychological coordination (personal – social) in the second year

students in the faculty of physical education for boys.

- There is a positive relationship between practicing sport shows and the improvement of psychological coordination with a positive effect on the level of performance in sport shows.

Recommendations

In the light of the research procedures, the researcher made the following recommendations:

- Developing psychological educational training courses to improve the level of sport shows trainers in sporting institutions and providing physical and human resources, in view of the important role they play.
- When designing sport shows, appropriate exercises should be directed and standardized in order to be compatible with the motor abilities of participants and the aim of the show.
- Participating in sport shows as they help improve the general psychological coordination.
- Organizing sport shows for participation in all important events.

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