A predictive study of the level of performance of the kinetic sentence on the floor movement system for juniors in gymnastics with a statistical significance of the h0armonic abilities

Dr/ Mohamed Abdellatef Abdelhady Elsayed*

The sports field is one of the that has witnessed fields great development in various disciplines. This came through extensive studies and research that contributed greatly to the development and supply of this field with many important information and provided coaches with a solid base for work and creativity and the progress of the training process at a scientific and codified pace to reach the best sports levels.

Fouad Abu Hatab and Amal Sadiq (2010 AD): The future was not clearly defined in the scientific method of research except with the emergence of the concept of regression in modern **Relationships** statistics. between variables, i.e. within (the empirical approach) that deals with the current situation, then soon the scientists discovered the huge possibilities included in this important statistical method, including estimating the value of an unknown variable from the known value of another variable as long as they have a calculated relationship to the correlation coefficient, and this is the essence of Statistical prediction The statistical method used in this case is called regression analysis, which may be simple or multiple. (12: 68).

Al-Sayyid Abu Hashem (2005 AD) states that one of the most widely used

statistical methods in various sciences is the regression analysis method. Great importance in planning and making discreet decisions in research (1:49)

Johannes Reh Wangiorge Ritter (2004 AD) adds that in recent years, there has been a great focus in specialized research on the issue of coordination capabilities, motoric which is known in some specialized coordination research as motor capabilities or "CMC"), which can be known as "the psychomotor factors that determine the optimal readiness to regulate and control motor activities." (27:15)

According to "Issam El-Din Abdel-Khaleq" (2005), quoting from (Raczek1991), the combinatorial "the abilities reflect complex relationships between neuropsychological factors, which enable the regulation and control of motor activities in complex multi-level biological systems based on foundations." There have been attempts to identify the defining elements of its internal structure and to predispositions. identify biological This task is not in the ease of operations associated with energy capabilities. (14:31)

And what was mentioned by "Abdul Aziz Al-Nimr, Nariman Al-

Doctor teacher, Department of Theories and Applications of Gymnastics, Exercise and Sports Performances - College of Physical Education - Sadat City University

Khatib (2000 AD), "Essam Al-Din Abdel-Khaleq" (2005)AD): that harmonic abilities are motor abilities that are determined mainly through the processes of directing and organizing movement, and the integrity of the interconnection between the nervous muscular and systems plays in controlling the Nerve signals have a critical role in the efficiency of these abilities, as these signals are sent simultaneously or in rapid succession in more than one part of the body until the movement takes place at the appropriate timing and in the required directions.(19: 131, 136) (14: 137)

El-Din Abdel-Khaleq Essam (2005) sees: "as fixed and relatively general assumptions for directing and regulating motor processes, and combinatorial capabilities are important in speed, accuracy, and in the sensory-motor system." Also. combinatorial abilities can be trained through specialized exercises specifically trainable)), and during the process of repair or development, it depends on the physical and cognitive factors and the motivating factors of the personality. (129:14)

"Mohamed Farghali" (2012) quoting "Ahmed Amin Fawzy" (1980 AD) states that its importance is evident in the fact that it participates with motor skills to form the harmonic foundations necessary for the development of the individual's level. It is necessary to learn any motor skill at the level of those abilities at the beginning of learning, and therefore it is necessary to have an appropriate level of harmonic abilities when learning motor skills. (21:62)

Issam Abdel-Khaleq (2003) believes that the harmonic abilities serve the structure of the total movement from the partial movements in a coordinated manner. (28: 189)

Arafat Ahmed And Tony (2003), quoting from (Ahmed Al-Hadi Yusef 1997 AD). states that gymnastics has an effective impact on the efficiency and vitality of the various organs of the body, and its practice results in physiological and formative changes in the various organs and systems of the body, and this explains the relationship between these physiological changes and the level of motor performance. in gymnastics. (31:19)

It is known that gymnastics competitions are held on six devices in accordance with the international law of men's gymnastics, where the nature of performance varies from one device to another according to the requirements of each device. The device of ground movements is one of the basic devices in all international and Olympic competitions, as a great renaissance appeared in many countries, including (Russia - Japan -Germany) in the second half of the twentieth century due to the progress of advanced scientific research and experiments carried out by researchers. This renaissance led to Increasing the level of difficulties for motor skills as well as linking them to acrobatic movements and motor expression movements.

It is mentioned by "Arafat Ahmed Tony" (2003) quoting from Loken et al 1977 AD, Hay (1975 AD), Edwards (1969 AD), where they indicated that the floor movements constitute an important basis on which to build gymnastics equipment and that the ground movements

It has to do with many movements performed on other devices, so somersaults, air cycles, and swings of the legs are similar in the course of the movement, whether performed on the ground or on other gymnastics equipment. Therefore, mastering the ground movements helps in positive selection in gymnastics (31:18).

Second, the research problem:

Gymnastics is characterized by high physical and skill performance based on the many requirements of the game, and the floor movement device is one of the most devices and has relative importance in the age stage, where various skill requirements and these are among the compulsory requirements under (9 years) and it is difficult for us to exclude or exclude any of them or any of them Qualities related to the skill performance of the player. The improvement of technical performance of gymnastics skills under (9) on the floor movement apparatus is one of the most important factors affecting the development of performance with achieving the best possible results. And the players' abilities to perform many motor duties on the rest of the equipment. And by noting the researcher during the practice of gymnastics as a player and

then a coach that the first stages must the harmonic focus on abilities required by gymnastics until the player possesses certain percentages of the different requirements for that sport Where it has been proven from sports research and objective field observation that the insufficient growth of these harmonic abilities leads to wasting a lot of time in training and not reaching ideal performance. The quality of the appropriate tests that represent this percentage shows that the training process has become a firstclass digital scientific process, and from here the researcher saw that there is an urgent need to know the ratios of the contribution of synergistic abilities in the kinetic sentence on the floor movement device for gymnasts, in order to try to reach the player to the required technical level from During the kinetic sentence and harmonic capabilities.

Third, the research objective:

1- Develop a predictive equation to calculate the degree of performance of the kinetic sentence on the floor movement device for junior gymnasts through the harmonic abilities of gymnasts

Fourth: Research hypotheses:

The researcher formulated his hypothesis in the form of questions

1. Is it possible to predict the level of the kinetic sentence of the gymnasts "Sanda" in terms of some of the harmonic abilities under study?

Fifth: Search terms:

1- Predictive studies: they depend in essence on a statistical method; Where the value of an unknown variable is

estimated from the known value of another variable, as long as there is a calculated correlation coefficient between them. This is the essence of statistical prediction, and the statistical method used in this case is called the regression analysis method, which may be simple or multiple (12: 66).

2- Harmonic capabilities: "relatively stable and general assumptions for guiding and regulating motor processes, and harmonic capabilities are important in speed, accuracy, and in the kinesthetic apparatus." Also, abilities can be trained harmonic specialized through training. specifically trainable. Reform or development, it depends on the physical and cognitive factors and the motivating factors of the personality. (27: 129)

3- The kinetic sentence: it is the tactical sentences (attack, defense or linking them) based on penetrating the opponent's field to score points at appropriate times during the match or specific places on the rug or both (time - place) during the match (procedural definition)

4- Contributor: it is a percentage of the total total percentage of the total contributions, as the group of contributions is the participation of the harmonic abilities combined in the prediction of the kinetic sentence. (procedural definition)

Sixth: Previous studies

1- Vladimir, al) M. (2001) (33) conducted a study entitled "The predictive value of kinetic combinatorial abilities as an indicator for assessing the level development of football players from 16-19 years (two years of follow-up studies)" and the study aimed to evaluate the predictive value For 23 indicators associated with seven harmonic abilities among juniors and high-level players, the researcher used the descriptive approach, and the study was conducted on a sample of (26) players from the age of 16 to 19 years who are registered at the School of Sports Championships in the city of "Wabis" Poland. in Three measurements were taken, and one of the most important results is that the highest predictive value was clearly seen in the ability to adapt movement, and the ability to integrate motor, and ability and rhythmic static and dynamic equilibrium, while a decrease in the predictive value appeared in the reaction speed, and the lowest The value was in the ability to spatial orientation.

Search procedures

First: Research Methodology:

The researcher used the descriptive approach, following the survey method, due to its relevance to the nature of this research.

Second: Research community and sample:

Description of the research population and sample:

The research community represents all gymnasts players under (9) years old who are registered in the records of the Egyptian Gymnastics Federation for the sports season 2018/2019. players from Cairo Governorate. (45) players as a sample for the application of the basic study, and (15) players as a sample for the survey study and Table (1) shows the size and distribution of the research

sample according to the clubs.

Table(1)

Sample total	Number of Players				
	survey study	studying the basic	area	The name of the club	No
29	7	22	Cairo sun club		1
31	8	23	Cairo Heliopolis Center		2
60	15	45	Sample total		
%100	%25	%75	Percentage		

Size and distribution of the research sample according to their clubs n =60

Table (1) shows a description of the total research sample according to their clubs and affiliated regions.

Conditions for selecting a research sample:

The researcher selected the research sample according to the following conditions:

1. The age group is under 9 years old, born in 2010 AD, which is the junior stage in gymnastics.

2. The research sample is close to age, training age, physical abilities and skill.

3. Availability of the appropriate number as a sample for this study.

4. Not participating in any other sport or getting any additional training

5. The presence of all members of the sample in Cairo.

6. The researcher worked as a coach for a team under 9 years old in the club.

7. They achieved at least the first three places in the republic and governorate championships.

b- Homogeneity of the research sample:

The researcher found homogeneity for the members of the total research sample, which numbered (60) gymnasts in the variables of growth and training age, as shown in Table (2) of the sample

homogeneity of growth variables n60=						
skewness	Mean	Variables				
186	.26833	8.3500	8.3000	Age		
666	1.03280	25.0000	24.6667	the weight		
668	1.16905	124.0000	123.8333	Length		
.857	.81650	4.5000	4.6667	training age		

Table (2)homogeneity of growth variables n60=

It is clear from the table that the homogeneity of the sample members was limited to (± 3) , which indicates

the moderation of the sample distribution

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Third: Tools and means of data collection:

Document analysis: the records of the Cairo gymnastics region in order to verify some data about the players, especially the training age.

Data registration forms: a form for recording players' measurements in the variables (growth - adaptive abilities wholesale level). Attachment (1)

Analysis of references and previous studies in the field of gymnastics (content analysis) in order to determine:

1- Harmonic abilities - the kinetic sentence in gymnastics.

Expert opinion survey forms (questionnaire) in order to find out the most frequently used kinetic sentence

in the matches in the age group under discussion, and they were presented to (7) experts in the field of gymnastics, Annex (2)

Determining the most important harmonic abilities of the kinetic group on the ground movements of the juniors:

To determine the special harmonic abilities in gymnastics for the age under discussion and to determine their tests, the combinatorial abilities were limited and presented to a group of experts in the academic and applied fields, numbering (7) appendix (2), in to determine the order most appropriate elements of special harmonic abilities in gymnastics, which are:

Table (3)

Determining the harmonic abilities of the motor group on the ground movement
device for juniors

Percentage	Frequency of approval	Skills	Μ
%100	7	The ability to assess the situation	1.
%100	7	The ability to connect	2.
%71.4	5	dexterity	3.
%100	7	The ability to put in the right effort	4.
%75.1	4	agility	5.
%71.4	5	The ability to make the most effort	6.
%100	7	The ability to maintain balance	7.
%42.8	3	Precision	8.
%71.4	5	Rhythm ability	9.
%71.4	5	Rapid response ability	10.
%100	7	The ability to sense muscle movement	11.
%71.4	5	The ability to adapt to changing situations	12.
%71.4	5	Accuracy of performance (spatial orientation)	13.
%100	7	Flexibility	14.

It is clear from Table (15) that the percentage of determining the harmonic abilities of the kinetic group on the ground movements apparatus of the juniors under study ranged between (42.8% - 100%), and the researcher

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satisfied the percentage (80%). The results showed that the most important of these special harmonic abilities are :

1. The ability to estimate the situation

2. The ability to connect the motor

3. The ability to make the appropriate effort

4. The ability to maintain balance

5. The ability to sense muscular movement

6. Flexibility

For: Special harmonic abilities tests in gymnastics:

In order to determine the most appropriate tests of special harmonic abilities in gymnastics, the tests were limited and presented to a group of experts in the academic and applied fields, and their number (7) is annex (2). :

	(2).
Table	(4)

Ratio	Repeatability	Test	Test Ability	
%100	7	Lance walking	The ability to assess the situation	1.
%85.7	6	Kinetic linkage in gymnastics	The ability to connect	2.
%100	7	angle in penny	The ability to maintain balance	3.
%85.7	6	Angular pivot action angle opening	The ability to sense muscle movement	4.
%100	7	Rundav Bakdav	The ability to make the right effort	5.
%100	7	side grand car	Flexibility	6.

Harmonic capabilities of the kinematic system on the ground motion apparatus

It is clear from Table (16) that the percentage of determining the harmonic abilities of the motor group on the ground movements apparatus of the juniors under discussion and the tests that measure these abilities after the presentation to the experts.

M: Skill tests: The researcher relied on the approved score in the regional championship and calculated it as a pre-measurement, and the approved score in the Republic's Championship for the same sample and calculated it as a post-measurement:

Fourth: The survey:

The exploratory study was conducted during the period from 1/11/2018 to

8/11/2018 on the exploratory research sample of (15) gymnasts, and the aim of this study was:

-1Verify the validity of (tools, devices, data registration forms) used in the research.

-2Reviewing the procedures, conditions and instructions of the tests used in the research.

-3Ensuring the availability of scientific transactions (honesty, stability, objectivity) for the tests used in the research.

C- Calculation of the scientific coefficients for the kinetic sentence tests- the harmonic abilities in question:

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-1Validity of the tests:

The validity of the tests under study was calculated using the validity of the differentiation between two groups, one distinct from players under 17 years of age, a sample of the

exploratory study of (15) players, and the other undistinguished from outside the research community and from beginners and from the same age group under 9 years.

Table (5)

The significance of the differences in the Mann-Whitney test for the two groups of the exploratory sample (distinguished - undistinguished) In the tests of the physical skill variables under consideration, n1 = n2 = 15

Probability of Error	Value "Z"	Total Rank	Average Rank	Number	Group	Variables	م
.003	2.024	57.00	9.50	15	Featured	The ability to	
	-2.934	21.00	3.50	15	Unmarked	assess the	1-
				30	Total	situation	
	2 000	56.00	9.33	15	Featured	The ability to	
.004	-2.900	22.00	3.67	15	Unmarked	connect	2-
				30	Total		
		57.00	9.50	15	Featured	The ability to	
.003	-2.923	21.00	3.50	15	Unmarked	maintain	3-
				30	Total	balance	
041	2.045	51.50	8.58	15	Featured	The ability to	4
.041 -2.043		26.50	4.42	15	Unmarked	sense muscle	4-
				30	Total	movement	
002	2 000	57.00	9.50	15	Featured	The ability to	
.005	-3.000	21.00	3.50	15	Unmarked	make the	5-
				30	Total	right effort	
		55.00	9.17	15	Featured		
.007	-2.708	23.00	3.83	15	Unmarked	Flexibility	6-
				30	Total		
		124	13.78	15	Featured	kinotio	
0.002	*3.481	47	5.22	15	Unmarked	sentence	7-
				30	Total	sentence	

The tabular value of "z" at the 0.05 level of significance is 1.96

It is evident from Table (5) that there are statistically significant differences between the distinct and non-distinguished group in the variables under study, where the calculated "y" value is greater than the

tabular "y" value at the 0.05 level of significance, which indicates the validity of the tests under study. test stability

The researcher used the test application and re-applied it to a

sample of her people (15) gymnasts players with a week difference between application and re-application to find Pearson's simple correlation coefficient between the two applications (first - second) in the tests under study,

Table (6)
Correlation coefficient between the first application and the second application
of the tests used in the research N15 =

correlation	The second application		The first application		unit of	tests	
coefficient	deviation	mean	deviation	mean	measure		
.942**	1.16905	13.8333	1.21106	13.6667	Meter	The ability to assess the situation	
.990**	.51640	6.6667	.51640	6.6667	number /s	The ability to connect	
.947**	1.16905	15.1667	1.26491	15.0000	a second	The ability to maintain balance	
.999**	3.18852	21.1667	3.57771	21.0000	a second	The ability to sense muscle movement	
.991**	.51640	4.3333	.51640	4.3333	number	The ability to make the right effort	
.995***	.51640	1.6667	.51640	1.6667	cm	Flexibility	
0.703	.24512	13.6400	.62973	13.690	Degree	kinetic sentence	

The results of the table indicate that there is a statistically significant correlation between the first application and the second application, which indicates the stability of the tests used in the research.

Fifth: Homogeneity of the (basic) research sample

The homogeneity of the research sample was carried out in some variables that may affect this study, namely (kinetic sentence, gymnastics harmonic abilities), and table (5) shows the homogeneity of the (basic) sample

Table (7)
Arithmetic mean, median, standard deviation, and skew coefficient
For the (basic) research sample $n = 15$

Skew	Standard	Median	Arithmetic	Unit of	Tests	Variables
coefficient	deviation		mean	measure		
248	1.75119	14.5000	14.6667	meter	Lance walking	The ability to assess the situation
0.000	1.04881	7.5000	7.5000	number /s	Kinetic linkage in gymnastics	The ability to connect

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For the (basic) research sample n = 15								
Skew coefficient	Standard deviation	Median	Arithmetic mean	Unit of measure	Tests	Variables		
.313	.75277	16.0000	15.8333	a second	angle in penny	The ability to maintain balance		
.857	.81650	22.5000	22.6667	a second	Angular pivot action angle opening	The ability to sense muscle movement		
-2.449	.40825	4.0000	3.8333	number	Rundav Bakdav	The ability to make the right effort		
.668	1.16905	1.0000	1.1667	cm	Grundkar Janbi	Flexibility		
0.18	0.79	7.20	7.25			kinetic sentence		

Follow Table (7) Arithmetic mean, median, standard deviation, and skew coefficient For the (basic) research sample n = 15

The results of Table (7) indicate the homogeneity of the sample members in (motor sentence harmonic abilities), where the torsion coefficient ranged between the torsion coefficient (+3), which indicates the homogeneity of the research sample Seventh: The basic study:

The researcher, after ensuring the availability of scientific coefficients (honesty, stability) for the candidate tests to measure some of the basic skills under research for gymnasts under (9) years old, applied them to the basic study sample of (45) gymnasts representing (2) clubs in the period from 10/ 11/2018 AD to 20/11/2018 AD, then the data was statistically processed.

Eighth: Statistical treatments:

In light of the research objectives and questions, the researcher used the following statistical treatments:

- SMA.

standard deviation.

percentage.

Pearson's simple correlation coefficient.

Mediator.

linear regression coefficient

The skew coefficient The researcher has satisfied the level of significance (0.05).

Presentation and discussion of results

Presentation and discussion of the results of the first hypothesis, which states:

Is it possible to predict the level of the kinetic sentence of gymnasts in terms of some of the harmonic abilities under study?).

First: Characterization of the kinematics data and the harmonic capabilities under investigation

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Table (8)	
Description of the kinetic sentence and the combinatorial abilities n = 45	

Skew coefficient	Standard deviation	Median	Arithmetic mean	Unit of measure	Tests	Variables	m
0.071	2.1	8.51	8.56	Ν		kinetic sentence	1.
639	2.18327	14.5000	14.1000	14.1000 meter Lance walking		The ability to assess the situation	2.
.111	.96609	7.5000	7.6000	number /s	Kinetic linkage in gymnastics	The ability to connect	3.
389	.84327	16.0000	15.6000	a second	angle in penny	The ability to maintain balance	4.
280	1.25167	22.0000	22.3000	a second	Angular pivot action angle opening	The ability to sense muscle movement	5.
091	.56765	4.0000	3.9000	Number	Rundav Bakdav	The ability to make the right effort	6.
.509	1.69967	1.5000	2.0000	Cm	Grundkar Janbi	Flexibility	7.

The results of the table refer to the arithmetic mean, standard deviation, skew coefficient and median of the kinetic bulk variables and the special harmonic abilities, as it is clear from the table the homogeneity of the sample members in these variables, where the skew coefficient ranged between (-.639, .509) and was limited to between (± 3) Which indicates the moderation of the sample distribution. Second: The correlation matrix for the kinetic sentence variables and the harmonic capabilities under study

Table (9)Correlation matrix table n = 45

n		Sentence Kinetic	1	2	3	4	5	6	
	Sentence								
	Kinetic								
1		0.659							
2		0.628	0.126						
3		628	0.066	0.064-					
4		0.783	0.083	0.164	0.095				
5		.322	0.159-	0.284	0.014-	0.549			
6		0.096	0.37	0.13-	0.094	0.278-	0.321-		

The tabular value of "t" at the level of significance (0.05) = (0.355)

It is clear from Table (9) regarding the correlation matrix for the variables of the motor sentence and the harmonic abilities under discussion that there is a significant correlation at the level of significance (0.05), where the value of the correlation coefficient ranged for the Balance walking test (659.), and the kinetic linkage test in gymnastics (628.) And the angular focus test open angle action (0.783)

and the Rundav-Pakdaev test (.722) with the kinetic bulk test, and there is no significant correlation at the level of significance (0.05) between the grenadier side test and the angle test and the kinetic sentence, where the coefficient of those abilities is less than (0.355).

Third: Predictive variables of tactical maps

Table (10)
Linear regression of harmonic abilities on the motor system by stepwise . method

	0					v		
percentage of contribution	t Total	f value	Standard error of estimation Value	Square of the modified correlation coefficient	coefficient Square of the multiple correlation coefficient	Polycorrelation	Contributing variable name	Contributing variable number
%52.10	10.673	30.49	0.55651	0.504	0.521	0.722	walking bliss	1
%70.70	7.457	32.544	0.44352	0.685	0.707	0.841	Kinetic linkage in gymnastics	2
%85.30	10.911	50.13	0.32046	0.836	0.853	0.923	Pivot angular action opening angle	3
%90.30	7.277	57.858	0.26578	0.887	0.903	0.95	Rundav Backdev Test	4

The results of Table (10) and Figure (3) indicate that there is a strong correlation between the motor system and the adaptive abilities, as it reached in the Balance walking test the multiple correlation coefficient reached (0.722) with a contribution rate of (52.10%) and the adjusted correlation coefficient was (0.504)and the equation was variance (30.49) and the t-value of the equation (10.673), and the kinetic linkage test in gymnastics reached the multiple correlation coefficient (0.841) with a contribution of (70.7%),the adjusted rate correlation coefficient was (0.685) and the variance of the equation (32.544)and the t-value of the equation (7.457),

The angular pivot test also reached the opening angle work, the multiple correlation coefficient reached (923) with a contribution rate of (85.3%), the adjusted correlation coefficient was (836.), the variance of the equation (50.130)and the t-value of the equation (10.911),and Rundav Bakdaev reached the multiple correlation coefficient. (.950) with a contribution rate of (90.3%) and the adjusted correlation coefficient was (.887) and the variance of the equation (57,858) and the t-value of the equation (7.277).

It is clear from the table that it is possible to rely on the synergistic

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abilities in statistically predicting the kinetic bulk t

Fourth: Predicting the kinetic sentence in terms of synergistic abilities

Table (11)

The value of the constant magnitude and the regression coefficient of the tactical maps in the prediction equations n = 45

Error percentage	Regression	Constant amount	Contributing variable name	Contributing variable number
0.02	0.108	818	walking bliss	1
0.475	0.088	3.539	walking bliss	2
0.016	0.054		Kinetic linkage in gymnastics	2
0.013	0.083		walking bliss	
0.481	0.059	5.252	Kinetic linkage in gymnastics	3
0.012	0.033-		Pivot angular action opening	5
			angle	
0.01	0.077		walking bliss	
0.007	0.069	2 0 4 2	Kinetic linkage in gymnastics	4
0.542	0.03-	5.942	Pivot angular action opening angle	4
0.01	0.025		Rundav Backdev Test	

It is clear from Table No. (11) of the equation of the predictive regression line and Figure (3) that they are:

1- The first contributory variable in the level B of the kinetic sentence: $y = w + m \ge 1$

r = (4.818) + (.108) walking bliss

2- The second contributory variable at the level of the motor system: y = s + m s 1 + m s 2

Y = (3.539) + (.088) Walking Balance + (.054) motor linkage in gymnastics

3- The third contributory variable in the level B of the motor system: y = s + m s 1 + m s 2 + m s 3

Y = (5.252) + (.083) Walking Balance + (.059) Kinetic linkage in gymnastics + (-.033) Angular pivot making an opening angle The fourth contributing variable in the motor sentence level: y = s + m c 1 + m c 2 + m c 3 + m c 4

Y = (3.942) + (.077) Walking Balance + (.069) Kinetic Link in Gymnastics + (-.030) Angular Opening Action + (.025) Rundav Backdive Test

Thus, the researcher has arrived at the equation of the predictive regression line for the standard sum of the kinetic sentence in terms of the constant amount of the fourth contributor, and the equation is:

y = (3.942) + m s 1 + m s 2 + m s 3 + m s 4

Y = (3.942) + (.077) Walking Balance + (.069) Kinetic Link in Gymnastics + (-.030) Angular Opening Action + (.025) Rundav Backdive Test

The percentage of the total contribution of the harmonic abilities in question reached (90.3%), as the rest

of the percentage of the contribution is attributed to other variables that the researcher could identify. not Therefore, the harmonic abilities are considered important in predicting the level of the kinetic sentence. The skills merge with each other and overlap and represent the combinatorial abilities (90.3%) of the motor system. When performing, we cannot separate each skill from the skills and consider that the skill is separate represented by one harmonic ability. The skills are successively and quickly until the completion of the motor sentence and gets all the points and throws his opponent to the ground.

This is consistent with what was mentioned by "Drog, W" (2002) that harmonic abilities are closely related to the development of artistic motor skills, and that specialized sports activity determines the quality of these abilities that must be developed and developed as the individual cannot master the skills Technical expertise in the specialized activity in the event that it lacks the harmonious capabilities of this activity (34: 47)

It also agrees with what was "MYNARSKI W., stated by ŻYWICKA A. (2004): that the possibilities of players reaching the higher levels in specialized sports activity become effective if it is possible to predict, according to scientific foundations and standards, the extent of the impact of practice and training on the development and development of those preparations in an effective manner that enables from

achieving progress in the field of specialization. (29:54)

Thus, the researcher answered the research question, which is whether it is possible to predict the level of the kinetic sentence of the gymnasts "Sanda" in terms of some of the harmonic abilities under study.

Conclusions and Recommendations: Conclusions

1. The first contributory variable in the B level of the motor system: y = w + m x 1

r = (4.818) + (.108) walking bliss

2. The second contributing variable in the motor system level: y = s + m s 1 + m s 2

Y = (3.539) + (.088) Walking Balance + (.054) motor linkage in gymnastics

4- The third contributory variable in the level B of the motor system: y = s + m s 1 + m s 2 + m s 3

Y = (5.252) + (.083) Walking Balance + (.059) Kinetic linkage in gymnastics + (-.033) Angular pivot making an opening angle

3. The fourth contributing variable in the motor system level: y = s + m s 1 + m s 2 + m s 3 + m s 4

Y = (3.942) + (.077) Walking Balance + (.069) Kinetic Link in Gymnastics + (-.030) Angular Opening Action + (.025) Rundav Backdive Test

Recommendations:

1- Using the prediction equation extracted in the process of selecting gymnasts players under (9) years periodically and continuously.

2- Relying on the prediction equation used to assess the technical level

3- Conducting other similar studies to measure other aspects of gymnastics

players (skill - anthropometricphysiological - psychological - sense of movement).

4- Conducting other similar studies to measure the (skillful- physicalanthropometric- physiologicalpsychological - kinesthetic) aspects of male and female gymnasts in different age groups.

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