

<b>The Influence of The Force and Speed Elements On The Effectiveness Of Performing Some Basic Skills for a Handball Youth Less Than 15 Years Old.</b> <b>“a Field Study On Boussaada’s Youth Team for Handball”.</b>	
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**الملخص:**

تطرق الباحث إلى تأثير بعض عناصر اللياقة البدنية على فعالية أداء بعض المهارات الأساسية لدى ناشئي كرة اليد، وهدفت الدراسة إلى التعرف على تأثير كل من القوة العضلية المتمثلة في القوة المميزة بالسرعة والقوة الانفجارية على أداء مهارة التصويب من الارتقاء تصويب كرة طيبة لأبعد مسافة وكذلك تأثيرها على مهارة التمرير، وأيضاً معرفة تأثير عنصر السرعة على أداء مهارات التصويب والخداع والتمرير في كرة اليد لدى الناشئين اقل من 15 سنة. وتمت الدراسة على فريق شباب بوسعادة للهواة صنف اقل من 15 سنة المتمثل في 12 لاعب ولتحقيق هذا الغرض قمنا بإجراء اختبارات بدنية ومهارية مقتبسة من المراجع العلمية وتم المصادقة عليها من طرف الخبراء، ونظراً لطبيعة الموضوع استخدمنا المنهج الوصفي الارتباطي، أما الوسائل الإحصائية فاعتمدنا على المتوسط الحسابي والانحراف المعياري، ومعامل الارتباط البسيط ليرسون. وخلصنا في الأخير: أن هناك علاقة ارتباطية معنوية بين كل من عناصر اللياقة البدنية ومهارات كرة اليد قيد الدراسة.

**الكلمات الدالة:** القوة، السرعة، المهارة، فئة الناشئين، كرة اليد.

**Abstract:**

The researcher discussed the effect of some elements of the fitness on the effectiveness of some basic skills of handball beginners. The study aimed to identify the effect of both the strength of muscle, which is described by the strength of speed, and explosive force on the performance skill, as well as its impact on the scrolling skill. Also, it attempted to know the effect of the speed element on the performance of the titration, deception and scrolling skills in handball for the young people under 15 years old. The study was conducted on the youth amateur group of Bousaada for those who had less than 15 years, which included 12 players. For achieving this purpose, we have carried out physical and professional tests derived from the scientific references and have been approved by the experts. Following the nature of the subject, the descriptive method has been used, and the statistical means have been relied on the arithmetic mean, the standard deviation, and

Pearson's simple correlation coefficient. Finally, we concluded that there is a significant correlation between both physical fitness and handball skills in this study.

**Key Words:** Strength, Speed, Skill, Junior Class, Handball.

### **Introduction :**

The handball field is considered among the sportive fields that has positively and largely affected in the sports training science, and developing the ways and the tools of training and preparing the player, besides, it is among the games that rely heavily on high level of fitness and mastering the skillful and schematic performance. and the player who is not prepared from the corporal side , fatigue shows on him, and that would cause the loss of the ball heavily besides the weakness or the absence of the planning thinking . in contrast, the player who is prepared from the corporal side, ends the game as the same way he started it. Moreover, the success in performing the handball skills needs to progress essential body skills that help in performing it perfectly. And there is more than one physical components that helps in performing each skill according to its nature , and that is confirmed by both Osama and Riad 1989AD, and Kemal and Deruish and other 2002AD, and on that the respiratory efficiency and the muscle strength, the speed, and the muscular capability are among the most important requirements for the handball player.<sup>1</sup>

The interest in physical fitness has become a national goal in so many countries around the world, what made its concerned devices to spread theoretical and scientific concepts about the body fitness.

Generally , the body fitness is the vast basis and the spinal column to practice sportive activities in all the age stages, and that emerges from it the special fitness that is specifically concerned with the way of the sport and what it needs from preparation according to the nature of the sport for every individual from the dynamic direction of the performance and the organics involved in it.<sup>2</sup>

And if we try to look at the operation of developing the physical attributes from the functional and the organic point of view, we would have found that these attributes like strength and speed are strongly

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<sup>1</sup> Mustafa ahmed abed El wahab, physical trainings in handball for youths (the theory and the application), Asyout University, the sportive world corporation for typography and publishing, Alexandria, 2015e, P.01,07-08-09

<sup>2</sup> Kemal Gil El Rabdhi, the twenty first sportive training, the educational sports colleague, has been published by the support of the Jordanian University, the 2004e, P.32.

related to each other, since the various functional and organic aspects of the individual are only an integral unit works in association with others and can not be separated from them.

And that means that it has to enhance and upgrade the work of all the organs and the different organs of the individual body that ensures and guaranties its dynamic activity.<sup>3</sup>

### **1-The Problematic :**

When the modern handball was requiring that the player has to have a high level of the body fitness, now a days, the physical attributes for the handball player are among the most important sides in the daily, weekly, periodically, and annually training plan. Because the modern handball is known by the speed in the field, and the skill in technical performance and the schematic one, and the basic rule for the player to reach the qualities that qualify him to build and develop the physical attributes, that have the direct impact on the level of the skill and the schematic performance of the player. And thus, the physical fitness for the handball player is related to the skillful and the schematic performance of the game.<sup>4</sup>

Muhammed Toufique el Waeely (2001AD) signals that the essential dynamic skill is the spinal column for the training operation especially the youth preparation stage where the youth meets the outlines for the simplest operations of the right skillful education that continues with him during his whole life, and mastering the essential skills is a factor that is based on it the reaching of the highest levels.

We have to realize that progressing the elements of the body fitness has to be in the limits of the abilities of the physical maturity and progress for the youths, also we should take into consideration the features of every activity with special qualities that require a certain period to form the training to achieve the required level, which means being careful while using the elements of the body fitness in its early stages. And body fitness means : the sound state of the young in terms of the efficiency of his physical condition that enables him from using it with skill and efficiency during the physical and the motor performance with the best possible degree and less effort. <sup>5</sup>

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<sup>3</sup> Ahmed Aoudah, the physical preparation in handball, El Rouad House for publication and distribution, 1st e, Oman Jordan, 2014,P.32.

<sup>4</sup> Kemal El Din Abed El Rahman Derouish and Others, the measurement and evaluation and analysis of the match In handball, The Ketab Center for publishing, Cairo, 2002 e, P.01-73-74.

<sup>5</sup>Muftly Ibrahim Hamad, The Sportive training for youths and The Successful Trainer, The Modern Kitab House, The Sportive Education, Hellouan, 2010, P.43

Also we have to focus on the aim of consisting a strong base for the elements of their body fitness and giving a chance in helping the elements of the body fitness in developing and building the essential skills in handball.

And starting from the importance of the body skills (strength and speed) and its big role in the handball, we made this research to show its relation and how much is its influence on some of the basic skills in handball, and we tried to form a problematic that we are trying to answer on in our research with these questions :

### **1-1- The General Question:**

Do the elements of speed and strength have an efficiency on the performance of some essential skills (scrolling, dribbling, pointing, deception) for a handball player who's age is less than 15 years old ?

### **1-2 The Sub-Questions:**

Is there a significant relationship between the strength characteristic of speed and the level of performance of the skill of scrolling and correction types in the handball youth less than 15 years old ?

Is there a significant relationship between the explosive strength and the level of performing the skill of passing, deceit and dribbling for a youth of a handball player who is less than 15 years old ?

Is there a significant correlation relationship between speed and the level of performing the skill of passing, dribbling and deceit for a handball youth who is less than 15 years old ?

### **2- The General Hypothesis:**

The Elements of power and speed have efficiency on the effectiveness of performing some basic skills (scrolling, dribbling, pointing, deception) for a handball youth who is less than 15 years old.<sup>6</sup>

### **2-1 The Sub-Hypothesis:**

There is a significant relationship between the strength that is qualified with speed and the level of doing the skill of the passing, dribbling and deceiving for the handball youth who is less than 15 years old.

### **3-The Importance of the study:**

-Knowing the importance of the strength and the speed that help effectively in the handball skills.

-Knowing the importance of the element of speed and strength for the youths less than 15 years old.

-Knowing the handball skills that are used during this stage for youths less than 15 years old.

- Caring about the youths category through putting the elements of the body fitness and the skills that go with them.

#### **4- The Aim of The Study:**

-Knowing the relationship between some of the elements of the body fitness and the essential skills in handball.

-Knowing the relationship between the elements of the body fitness ( the explosive strength, the strength that is qualified with speed and the speed) and the handball skills ( pointing, passing, dribbling, and deceiving).

-Knowing the relationship between speed and the skills of the dribbling, passing, and deceiving.

#### **5-The Definition of the concepts and the terms:**

##### **5-1-The Muscle Strength:**

**The Lexical Definition of Strength :** the opposite of weak, strong, a very strong man : Jibril peace be upon him. The rain is going stronger<sup>7</sup>

**Conetxtually :** Identifies it “ matvieve 1983” : it is the ability to overcome an external carriage thanks to the muscular effort, and physically we can identify the strength as a maximum tension that the muscle makes during the shrinkage.<sup>8</sup>

**The Procedural Definition :** it is the ability of the body muscles on producing enough power in its muximum constriction to resist various external loads.

##### **The speed:**

**The Lexical Definition of Speed :** the opposite of the slow, speed up, accelerates, quicken. Speed it up : started it. The Hasty : The Initiator of Evil .<sup>9</sup>

**Contextually :** According to Jean-Louis, Michel Pradet (1993) : is the ability to do as many movements as possible is less time.<sup>10</sup>

**The Procedural Definition :** it is the ability to passe a certain distance in the shortest possible time. And it relies on the physiology of the fast white muscle fibers that contributes in the speed racing .

##### **5-2- The skill:**

<sup>7</sup> Salih ali salih and amina chikh solayman elahmed net dectionary in the arabic language.1401H. p550.

<sup>8</sup> Qtvive, Training Fundamental Aspects, Vigot edition , the year of 1983,P.129

<sup>9</sup> - Salih ali salih and amina chikh silyman elahmed Previous reference p253.

<sup>10</sup> Jean-Louis Hubiche, Michel Pradet, Understanding the Athletics, Insep-Publication, 1993,P.42

**The Lexical Definition:** it is from the verb dowry, I.e.: the dexterity and the mastering, and the skilled is the smart and the glorious.<sup>11</sup>

**The Contextual Definition:** the term skill refers to the performance of a given act and the way in which it is performed.<sup>12</sup>

And Weineck also defines it as a solution for a certain dynamic problem in a rational and economic way.<sup>13</sup>

**The Procedural Definition :** it is the performance that the player gets through practising the sportive activities by the repeat and the attempt and the mistake.

**5-3 The Youth Category:** Mufty Ibrahim Hamad identifies the youths as young people from the two sexes whose ages are between 6 and 14 years old, and these years include each of the middle childhood stages ( almost between 7 to 10 years), and the late childhood stage (almost 11 to 13 years old ), and the adolescence stage ( until the age of 14 years old). And youths are often described as the youngest kids from 13 to 15years old in general, despite the individual differences between them until puberty.

**The Procedural Definition :** they are the kids aged between 19 to 15 years old, and this stage is considered as the golden age to learn and get the harmonic capabilities and the other diffrent dynamic skills, and this category should be given the adequate care.

#### **5-4- The Handball:**

**The Contextual Definition:** it is a collective sport that has appeared during the 19<sup>th</sup> century, it is to be played by hands where to teams scramble together and each one of the has seven players, they play the match on a rectangular playground, that is put on it two grids to score the goals, and the aim of each team is to score as much goals as possible to win the game.<sup>14</sup>

And it takes a field that has the length of 40 meters and the breath of 20 meters, and it is managed by two arbitrators , and it is consisted of two rounds, the length of each one is 30 minutes, and they are separated by 10 minutes for recovery and rest.

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<sup>11</sup> El Munjid in the Arabic Language and Media, The Oriental House, Lebanon, 1987,P.77

<sup>12</sup>Mustafa Mohamed Zeidan, Ramdan Mussa, teaching a youth basketball, the sportive education colleague, the Azhar University, 2005°, P.2and 23

<sup>13</sup>Fathi Hadi Ahmed El Sakaf, The Modern Scientific Training in handball, the national Haouras for publishing and distributing, Alexanderia, 2013, P.26

<sup>14</sup> Muhamed Hassen Alaoui, Muhamed Naser El Din Ghadban, Measurement in the sportive education, and the measurement science , El Fikr AL Arabi House, 3<sup>rd</sup> e, Egypte,1995,P.26

**The Procedural Definition :** it is a team sport to be played between two teams each team is constructed of 7 players on a playground that is 40m and 20 meters wide, and a team is to be considered winner if it registers the highest number of goals in the duration of 60 minutes, and the two rounds are separated by 10 minutes for rest.

#### **6- The Previous Study:**

**6-1 The Study of Alaa Husein Abu El Alaa a doctorate dissertation, the education of sports for girls collage, the holouan university 2004 : a suggested training program for body fitness and the skillful performance and its effectiveness on the physical fitness and some moral changes for the handball youths:**

**The study aimed to:** - designing a training program suggested for the body fitness and the skillful performance for the handball youths 1989. -Knowing the influence of the training program on each of the:

Body Fitness that is for the Handball and it includes: ( strength, ability, speed, fitness, flexibility...)

The skillful Performance in handball ( Passing, Dribbling, Pointing, and deceiving).

**The used curriculum:** the researcher used the experimental method

The Research Sample: 20 players who have chosen to play with the intentional way from the handball youths 1989.

**Results:** the program has a positive influence on all the variables under study where it's been found some moral differences between the pre-test and the post-test in the significant level 0.05 for the telemetry

**6-2- The Study of Mai Ali Aziz a published article in the education of sports science magazine, the fourth issue, the second folder, iraq 2009: the percentage of the contribution of the physical body fitness on the performance of some basic skills for handball for the students of the sports education university of EL Qadisia:**

The Study aimed to know the percentage of the contribution of the physical fitness ( flexibility, muscular strength, the muscular endurance, the body composition and the pneumatic capabilities) by performing some basic skills oh handball ( passing, dribbling, pointing and the defensive movements).

**And for the searching hypothesis:** there is a correlation between the elements of the physical fitness and the performance of some basic skills of this later handball.

And the researcher used the descriptive method with the associative method, and for the sample of the study, there were 23 students from the students of EL Qadisia University.

**The Used Statistical Means:** mean standard deviation and correlation coefficient for Pearson, K2, percentage, the coefficient of determination (R2) and it is called the percentage of the correlation, test(s) for the morality of association.

**The Results:**

- it was appeared to be no contribution to the physiological fitness elements by performing the scrolling skill.
- there is a contributive percentage for the strength that is qualified with the feet muscles and the explosive strength for the arm muscles by doing the getting skill.
- the flexibility of the trunk and the explosive strength for the muscles of the arms have contributed in doing the scrolling skill.

**6-3- The Study of the student Wadah Ahmed Seif Abduh master thesis the physics and sports education, university of algiers 03 2012: The Relationship between some elements of the the body fitness with the overwhelming blow for the volley ball players in Yeman Republic:** and the study aimed to:

- know the relationship between the elements of the body fitness and some significant of the growth of the players of volleyball.
- know the relationship between the elements of the growth and the overwhelming blow for the volleyball players.
- know the relationship between some of the elements of the body fitness and the overwhelming blow for the volleyball players.

The researcher used the descriptive method that needs describing and analyzing, as for the sample, it was consisted of 65 players belong to 5 clubs from 12 clubs.

**The Used Statistical Means:** the repetition and percentage, the arithmetic average, standard deviation, T test, coefficient of the correlation for Pearson, the coefficient of the correlation for Alfa Kronbakh

**The Results:**

- There is no extreme relationship that signifies statistically in the body fitness for volleyball players according to their growth (age, tall, weight)
- there is no extreme relationship that signifies statistically in the overwhelming blow for the volleyball according to their growth (age, tall, weight).
- there is no relationship between the elements of the body fitness and the overwhelming blow and the two centers 4 and 5 for the volleyball players.

## **7- The Methodological Procedures of The Study:**

### **7-1 the Methodology:**

We used the descriptive method with the well method for studying the phenomena and its identifying.

and the descriptive method is identified as a way to analyze scientifically in a regular way to reach to certain goals to a social problem and what is considered as descriptive method to describe the studied phenomenon and picture it in a quantitative way through gathering précised information about the problem and categorizing and analyzing it and putting it under study.<sup>15</sup>

**7-2- The searching society:** it is represented in searching in the team of the youths of Bousaada of handball amateur less than 15 years old and who are 12 players.

**7-3The Research Sample:** it is represented in the team of the youths of Bousaada amateur for handball, and their number was 12 players of the category of the 15years old.

### **7-4- the fields of the study:**

#### **7-4-1The Spatial Field:**

The Multi-Sports hall in Bousaada countryside.

#### **7-4-2 The Temporal Field:**

This research has been made ( The Experimental experiment, The main experience) starting from 12 april 2016 until 10 january 2017 where we have made some skillful and physical tests and then analyzing the results that has been found using the statistical ways.

### **7-5- The Exploratory Study:**

The exploratory study has a big importance, because the basis where the researcher builds on his primary imagination about his study and the field of applying it. Where we made a call with the state league for the handball to take enough information, and then we visited several clubs to know the society and the sample of the research that we are going to make a study on. And the appropriate searching tool and if the suggested exams fit with the chosen sample and if we can really apply it, and also identifying the time to meet the research sample and make the principle study.<sup>16</sup>

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<sup>15</sup> Kemal Ait Mansour, Rabeh Taher : The Methodology of making a scientific research, el Houda house for publication and distribution, Ail el Melila, Algeria, 2003, P.18

<sup>16</sup> Mujadi Rabeh : Some Emotional Features and its relationship to the effeciency in teaching for the T B R teachers, A Magister Dissertation about the theory and the methodology of T B R, Sidi Abdullah University, Algiers, 2007-2008, without a page .

**7-6 The Experimental experiment:**

We have made the exploratory study on a sample that is consisted of 10 players for the team of Taraji El M'sila for handball the category of the less than 16 years old youths, where they have been excluded after the original experiment, and the taken sample was identical to the age conditions and the morphological qualities for the research sample. And also we made a test and a retest at the same time with the same conditions, and it is the same time to make all the suggested tests the physical and the skillful to the handball in this research, and the aim of this exploratory study is to study the quality of the suggested tests I;e: stability, faith, subjectivity for these tests

**7-8 the the Seccometeric characteristics of the tool:**

**7-8-1 Stability:** to determine the validity of the tests we did some tests to calculate the stability of the coefficient to each test with the way ( Test- Retest) where we applied the first exams on a sample of players for the team of Taraji El Msila the category of the less than 15 years old and after a week we made the same tests under the same conditions. so we got the conclusion of the results of the degree of the stability to each test as it is explains in the table number 01.

**7-8-2- faith:** and to make sure of the reliability of the tests, we used the self reliability that is measured by counting the quadrilateral trunk for the coefficient of the stability of the test, by relying on this kind of reliability we reached the results explained on the table number 01.

**The table number 01:** it represents the reliability and the stability of the physical and skillfull tests.

statistical milestones tests	The sample siz	The degree of liberty n-01	The correlational level 0.05	The stability coefficient (K.M) <sup>19</sup>	The reliability coefficient (K.M) <sup>18</sup>	The value of the chart (R) <sup>17</sup>	The kind of the correlation
Test throw 03kg medical balls	10	09	0.05	0.88	0.93	0.60	correlation
Vertical jump sargent	10	09		0.93	0.96		correlation
Forward jump 03 steps	10	09		0.78	0.88		correlation
Drag on the mind	10	09		0.96	0.97		correlation
30m speed	10	09		0.61	0.78		correlation
scrolling	10	09		0.66	0.81		correlation
Pointing a medical ball for the farthest distance	10	09		0.81	0.9		correlation
Pointing from the upgrade	10	09		0.74	0.86		correlation
The deceit	10	09		0.63	0.79		correlation

### 7-9- The Tools of The Study:

**7-9-1 The Questionnaire:** has been distributed to know how to use the elements of the body fitness.

#### 7-9-2 the tests:

We used a group of tests to measure the skillful and physical sides in handball and has been displayed and discussed on a group of experts and specialists in the training field in handball that has shown their approval on it.

#### 7-9-2-1 The physical Tests

##### The forward throwing test for medical balls 03kg<sup>20</sup>

The point is to measure the explosive strength for the upper parts.

##### The vertical Jump For Sargent:<sup>21</sup>

It aims is to measure the explosive strength for feet in the vertical jump.

##### The jumping from stability 03 steps test:<sup>22</sup>

<sup>17</sup> R, The Pearson's Coefficient, the concluded value from the chart on the significant level 0.05 the freedom degree n-1.

<sup>18</sup> K.M, the Calculated Result through the results of the sample.

<sup>19</sup> K.M, The Calculated Value through the results of the sample.

<sup>20</sup> Amrou Abou Djemal and Ismail EL Nemki, planning programs to educate kids and youths in football, 1<sup>st</sup> e .El Kitab Center,Cairo, 1998,P.120

<sup>21</sup> Fethi Ahmed Hadi El Sakaf, the modern scientific training in handball, the National haouras Institution, Alexandria , 2013, P.223

<sup>22</sup> Amrou abu el majed, a previously mentioned source, 1998,P.123

It aims to measure the special force for the feet muscles where the player has to run 03 meters as a approximate stage and then he makes 03 fast steps and the counting starts from the last jump.

**The Drug on Mind Test:<sup>23</sup>**

It aims to measure the strength qualified with speed for the arm and shoulder area

**The 30 meters Run:<sup>24</sup>**

It measures the transitional speed

**7-9-2-2- the skillful tests:**

**the test of the scrolling through running right and left<sup>25</sup>** : the aim from it is to measure the speed and the accuracy of the scrolling

When giving the starting signal the player runs fast to catch the ball from the helper and passes it to the person (01) and the performance goes on until the player arrives to the finish line

**The test of pointing a medical ball to the farthest distance:<sup>26</sup>**

The point from it is to measure the power of pointing using a medical ball that has the size of a handball the player catches the ball using his hands and then he throws it using one hand on a distance of 40 meters

**The test of pointing through upgrading:**

The point from it is to measure the accuracy of the pointing of the drawn goals on the grid using 10 balls

**The deceit test:**

**The point from it is to test the speed the performance of the skillful body shuffle using the ball**

The deceit with accuracy and the speed in the pointing by putting funnels on the line 8 meters from the grid that are separated by the distance of 1 meter, the player passes by the left foot on the first funnel and the right foot on the second funnel with a simple trick and the end is by pointing as lesser time as possible.

**7-10 The statistical Means:**

The Arithmetic Average, the standard deviation, the statistical bag (spss), the simple correlation coefficient for Pearson (R) .

<sup>23</sup> Mohamed Hassen Alaoui and Muhamed naser El Din Rodouan, the dynamic performance test, El Fikr AL ARABi House, Cairo, 2001, P.123

<sup>24</sup> Amrou abu el Majed Djemal, a previously mentioned source, 1998, P.123

<sup>25</sup> Kemal El din Abed El Rahman Derouish and others, measuring and evaluating and analyzing the match in handball-theories-application, El Kitab Center for Publication, 1<sup>st</sup> e, Cairo, 2002, P.122

<sup>26</sup> Daa El KHayat, 2001, P. 437.

The Coefficient (T R) to get a correlation significance.<sup>27</sup>

$$t_r = \frac{r \sqrt{n-2}}{\sqrt{1-r^2}}$$

**8- Displaying and analyzing and discussing the results of the study:**  
**8-1 displaying and analyzing and discussing the results of the first hypothesis:** there is a relationship that has a statistical significance between the strength that is qualified with speed and the level of performing the scrolling and pointing skill for the handball youth who is less than 15 years old.

**Table 02:** the relationship between the strength qualified with speed and the scrolling, passing and pointing for a handball youth.

The skills test The physical tests	Scroll back and forth	Pointing a medical ball to the farthest distance	Pointing from the upgrade	The value of ( R) chart	The calculated T			T the charted	The level of significance	The Kind of the correlation
					2.37	3.19	3.38			
Jumping forward 03 steps	0.60	0.71	0.73	0.57	2.62	3.79	4.20	2.22	0.05	Signific-ant
Drag on the mind	0.64	0.77	0.80	0.77	2.62	3.79	4.20	2.22	0.05	Signific-ant

The correlation value of the correlation coefficient =0.57 when the error ratio is 0.05 and degree of freedom 10

**Through the table (02) :** It's clear that there is a corporal moderate relationship between the jumping forward 03 steps test and the scrolling skill that is about 0.60 , and there is a strong corporal relationship between jumping forward and pointing from the upgrade that is about 0.71, and there is a strong corporal moderate relationship between jumping forward and pointing from the upgrade and that is about 0.73,

<sup>27</sup> Wadee Yassin Muhamed elTakrity, Hassen Muhamed abed el Oubeidy, The Statistical Encyclopedia and the computer application in the physical and the sportive education, 1<sup>st</sup> e, EL Wafaa house for the publication dunia in Alexandria, 2012,P. 327.

and it was all bigger than the value ( R) the charted (0.57) on the level (0.05) and the freedom degree (10), and that what the value ( T) confirms that is estimated successively (3.38, 3.19, 2.37), and it is bigger than the charted value (T) (2.22) on the significant level (0.05) and the degree of the freedom (10), and thus its clear that there are significant differences, I.e.: there is a relation between jumping forward 03 steps and the scrolling and pointing skill.

It's clear that there is a moderate corporal relationship between the drag on mind test and the scrolling test that is estimated by 0.64, and there is a strong moderate relationship between the drag on mind and pointing a medical ball for the farthest distance that is estimated by 0.77, and there is a strong moderate relationship between the drag on mind and pointing from the upgrade that is estimated by 0.80 and it was all bigger than the value (R) charted (0.57) on the level (0.05) and the freedom degree (10), and that is what the value (T) the estimated successively (2.62, 3.79,4.20) and is bigger than the value (T) charted (2.22) on the significant level (0.05) and the freedom degree (10), and thus , it is clear that there are significant corporal differences, I:e: there is a relation between the drag on mind and the pointing and scrolling skill.

And thus we came out with the result that there is a moderate moral relationship that has a statistical significance between the strength qualified with speed and the level of performing the scrolling and pointing skill for a handball youth who is less than 15 years old. and our study agrees with **the study that doctor oula hassan hussein abu el oula** has done, and she has found that there are significant differences between strength and the other diffrent skills of handball. And it differs with the **study of Dr Mai Ali Aziz** that says that there is no contributive ratio for the strength that is qualified with speed on the scrolling skill and she concluded that it contributes relatively in the recieving skill.

And from it we came out with the result that the first hypothesis is achieved and that what Mustafa Ahmed Abed El Wahab (2015) signals to “ that the muscular strength is among the most dynamic factures for the motor performance and among the most important reasons in developing the performance and it differs from its characters according to the nature of the required motor performance to perform the skillful sides, the strength qualified with speed is among the required physical attributes for the handball player”.<sup>28</sup>

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<sup>28</sup> Mustafa Ahmed Abed Al Wahab, P.09

And that what Ali Fehmi El bik (1992) confirms on: “that the inability to show the muscular strength influences strongly on mastering the skillful performance, besides that the ability to show the enough quantity of strength that guarantees the proper direction of the ball” And each of Larson (197) and Matius (1978) agree that: “ the level of the sportive performance relies on what the players owns from physical attributes and among them the muscular strength and they ensure on the importance of this element for the good performance for the athletes.”<sup>29</sup>

**8-2- displaying and analyzing and discussing the results of the second hypothesis: there is a relationship with a statistical significance between the explosive strength and the level of performing the scrolling and passing skill for the handball youths less than 15 years old.**

**Table( 03):** The relationship between the explosive strength and the scrolling and pointing skill for a handball youth.

The skills test / The physical tests	Scroll back and forth	Pointing a medical ball to the farthest distance	Pointing from the upgrade	The value of ( R ) chart	The calculated T	T the charted	The level of significance	The Kind of the correlation		
The throwing of a medical ball 03 kg	0.91	0.94	0.90	0.57	8.72	6.82	6.60	2.22	0.05	significa-nt
The vertical jump sergant	0.61	0.89	0.84		2.43	6.22	4.89			significa-nt
The correlation value of the correlation coefficient =057 when the error ratio is 0.05 and degree of freedom 10										

**Through the table (03):** It’s clear that there is a moderate relationship between the throwing of a medical ball 03 kg test and the scrolling skill that is estimated to be about 0.91, and the existence of a strong moderate relationship between the throwing of a medical ball 03 kg and

<sup>29</sup> Mustafa Ahmed Abed Al Wahab, Same Source

pointing a medical ball as far as possible and that is estimated to be about 0.94, and the existence of corporal strong relationship between the throwing of a medical ball 03kg test and pointing from the upgrade and that is appreciated to be 0.90, and they were all bigger than the charted value (R) (0.57) on the significant level (0.005) and the degree of freedom (10), and that what the value (T) confirms on that calculated successively (6.60,6,82,8.72), and it is bigger than the value of the charted (T) (2.22) on the level of significance (0.05) and the degree of freedom (10), and thus we see that there are corporal significant differences, I.e. there is a relationship between the throwing of a medical ball 03 kg and the pointing and scrolling skill.

It's shown that there is a medium corporate relationship between the vertical jump Sergeant and the scrolling skill that is estimated to be about 0.61, and the existence of a medium moral relationship between the vertical jump for sergeant and the scrolling skill that is estimated to be about 0.61, and the existence of strong moral relationship between the vertical jump for sergeant and the pointing of a medical ball as far as possible that is estimated to be about 0.89, and the existence of a corporal strong relationship between the vertical jump for sergeant and the pointing from the upgrade that is estimated to be about 0.84, and they were all bigger than the charted value (T) (0.57) on the significance level (0.05) and the degree of freedom (10), and that what the value (T) confirms on, that is estimated successively (4.89,6.22,2.43), and it is bigger than the charted value (T) (2.22) on the level of significance (0.05) and the degree of freedom (10), and thus we find that there are corporal significant differences, I.e. there is a relationship between the vertical jump for sergeant and the pointing and scrolling skill.

And thus we find that there is a positive moral relationship signifies statistically between the explosive strength and the level of performing the scrolling and pointing skill for a handball youth who is less than 15 years old. and that what the previous **study that Dr Mai Ali Aziz** has done came up with, that has found out that the explosive power for the muscles of the arms has influence on performing the scrolling skill. And it differs with us that it hasn't a contributive ratio on the scrolling skill. And our study agrees with **the study of wadah ahmed seif abduh** that says that there is a correlation between the strength and the volleyball skills.

And from it we conclude that the second hypothesis is achieved and that what Mustafa Ahmed Abed El Wahab (2015) signals to: " the success in performing the handball skills needs to develop essential physical

qualities that contributes in performing it perfectly, and there is more than one physical element that contributes in performing each skill according to its nature".<sup>30</sup>

And that agrees with the study of Leith Ibrahim Jasem El Ghariri (2007) with the title of the special force and its relation with the strength and the accuracy of the pointing through different levels of the physical effort for the handball players, that has came finally with the conclusion that the explosive strength has a positive relationship with the strength of the pointing for the searching sample.<sup>31</sup>

Also the study of Muhamed Khalil EL OUkeidy (2008): the relationship between the explosive strength for the arms and the feet and some changes of the bayou kinematic for a handball player, and the existence of a moral relationship between the explosive strength of the feet and the throwing speed.<sup>32</sup>

**8-3- Displaying and Analyzing and Discussing The Results of the Third Hypothesis: there is a relationship that has a statistical significance between strength and speed and the level pf performing the scrolling and deceiving skill for a handball youth who is less than 15 years old.**

Table 04: The Relation between the speed element and the scrolling and deceit skill for a handball youth.

Exams of te skills	Statistical guides for the exams		Statistical guides for the exam of the speed		The value of (R)		The value of (T)		The signifi-cant level	The kind of the relation
	x	s	x	s	Calculated	Charted	Calculated	Charted		
The Scrolling exam	10.33	1.24			0.83		4.68		0.05	Signific-ant
The deceit exam	2.41	0.46	4.31	0.31	0.79	0.57	4.07	0.22		Signific-ant
The Charted Value for The Coefficient of The correlation=057 on the error ratio 0.05 and the degree of the freedom 10										

<sup>30</sup> Mustafa Ahmed Abed Al Wahab, a previously mentioned source, p.08

<sup>31</sup> Leith Ibrahim Djasem El Ghariri, The Special force and its relation to the strength and the accuracy of the pointing through different levels of physical effort for the handball players, a published research in the science of the sports education, third issue, second folder,2007,P129

<sup>32</sup> Muhamed Khalil EL Oukeidy, The relationship between the explosive force for arms and feet and some bayou kinematic for the handball players, a published research in El Rafidein Magazin for the sportive science, folder number 12, 45 issue,2008,p140

**Through the table 04:**

It's shown that there is a strong positive relationship between the scrolling exam and the 30m speed exam that is appreciated to be 0.83, and it is bigger than the charted value ( $R$ ) (0.05) and the freedom degree (10), and thus we find that there are significant corporal differences. I.e. there is a relationship between the 30m speed Test and the scrolling skill.

Also it's shown that there is a corporal strong relationship between the 30m speed test and the deceit skill that is appreciated to be around 0.79, and it is bigger than the charted value ( $R$ ) (0.57) on the level of significance (0.05) and the freedom degree (10), and from it we find that there are corporal significant differences, I.e. there is a relationship between the 30m speed test and the deceit skill.

To sum up, we reached the conclusion that there is a statistical significant corporal positive relationship between the speed element and the level of performing the scrolling and deceit skill for a handball player younger than 15 years old. and our study agrees with the previous **study that Dr Oula Hassan Hussein Abu El Alla** that has deduced that there are significant differences between strength and the other different handball skills. And **the study of Wadah Ahmed Seif Abduh** that has conducted that there is a significant correlation between speed and the volleyball skills.

As a result, the second hypothesis is achieved and that what Leila Labib and others (1993) signal to: "the existence of the element of speed in handball enables the player to perform the primary skills with adequate speed also it enables him to move quickly inside the playground whether during the attack operations or the defensive ones".

And each of Kemal Abed El Rahman and others (1998), Muhamed Hassan Alaoui and Muhamed Naser El din Rodouane (2003) agree on: "the speed is one of the primary components in the dynamic performance in handball".<sup>33</sup>

And speed is considered to be one of the absolute factors that influences directly on the result of the match, besides the improvements that you hear about during the playing is often because of the speed factor. Moreover, the speed factor is what makes the player better than the others in a lot of attack situations during the match.

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<sup>33</sup> Mustapha ahmed Abed Al Wahab, a previously mentioned source, P.11

And from what the results of the three hypothesis have reached we can say that the general hypothesis is achieved. I.e. strength and speed have influence on the effectiveness of performing the handball skills for youths less than 15 years old

#### **The Results:**

- there is a statistical significant relationship between the strength qualified with speed of the arm muscles and the pointing and scrolling skill for a handball youth less than 15 years old.
- there is a statistical significant relationship between the strength qualified with speed for the feet muscles and the pointing and scrolling skill for a handball youth less than 15 years old.
- there is a statistical significant relationship between the explosive strength for the arms muscles and the scrolling and pointing skill for a handball youth less than 15 years old.
- there is a statistical significant relationship between the explosive strength for the feet muscles and the pointing and scrolling skill for a handball youth less than 15 years old.
- there is a statistical significant relationship between speed and the scrolling and deceit skill for a handball youth less than 15 years old.

#### **Suggestions and Recommendations:**

- giving the needed care for the physical fitness elements that has a relation to the skillful performance in handball.
- the importance of building the explosive strength and the strength qualified with speed for hands and feet for its importance in the speed of scrolling and pointing.
- the importance of building speed for its importance in the quickness of deceit and scrolling.
- relating the body fitness elements with the functional variables and the skillful performance.
- putting accurate training programs that develops the physical utterances that fit the youths to upgrade the skillful level in handball.
- the trainers care for the youths category.
- make similar researches on other physical elements and relate them to other skills.
- make similar researches on a certain age period that differs from our study.

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