# T.R.N.C <br> NEAR EAST UNIVERSITY <br> INSTITUTE OF HEALTH SCIENCES 

# COMPARISON OF TRADITIONAL INSTRUCTION EDUCATIONAL VIDEOS AND MIXED METHODS FOR SHOOTING AND PASSING SKILLS IN BASKETBALL 

## SIZAR SULAIMAN ESHAQ

## PHYSICAL EDUCATION AND SPORTS

MASTER THESIS

NICOSIA

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(KURDISTAN REGION OF IRAQI)

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## GIFING

## DEDICATED TO MY FAMILY

## SPECIALLY MY FATHER AND MY MOTHER

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#### Abstract

SIZAR SULAIMAN ESHAQ. Comparison of traditional instruction educational videos and mixed methods for Shooting and Passing skills in Basketball (Kurdistan Region Of Iraq), Near East University, Institute of Health Sciences, School of Physical Education and Sports, Master Thesis, Nicosia, 2017.


The purpose of this study was to compare three different instructional methods educational videos (EV), traditional coaching (TC) and mixed method (MM) by means of the skill test scores AAHPERD shooting and passing tests. The study sample consists of 39 students boys aged $11.2 \pm 0.6$ selected for this study by random sampling method, enrolled in the basketball summer school held in the Sanhareeb Sport Club Duhok /Kurdistan - Iraq, the experimental research method was used to being appropriate to the nature of the research's issue. Instruction, practice, and testing for this study were held on six separate and successive weeks. Participants were randomly assigned to one of the three different teaching methods EV, TC and MM creating three independent groups of 13 students. The AAHPERD basketball test and the AAHPERD basketball passing tests were used to evaluate the shooting and passing ability. One way ANOVA select LSD and Paired-Samples T. Test, were used for comparisons between three method groups. Therefore, according to the hypothesis there is going to be a difference between pre-test and post-test, and also between EV, TC and MM groups.

The results showed that there is a significant difference in the means between the pre-test and post-test Preference for post-test in basic skills test of three method groups EV, TC and MM. also, there is a significant difference in the means between the three method groups, EV, TC, and MM, in the post-test for basic skills test, the mixed method group ( $12.461 \pm 2.145, \mathrm{p}<0.05$ ) surpasses the educational video ( $8.615 \pm 1.325, \mathrm{p}<0.05$ ) and the traditional coaching groups ( $10.153 \pm 1.463, \mathrm{p}<0.05$ ) in sequence. Also, the results of this study are consistent with the concept of hypothesis, the researcher indicates the reason to the effectiveness of the executed program by the coach and the compact between the educational video and the traditional style of the coach in which the mixture of both methods showed the appearance of the best result in learning the skills of shooting and passing in basketball. The study showed that there is a significant difference between the pre-test and post-test Preference for post-test in basic skills test of three method groups, $E V, T C$ and $M M$ in basketball game.

## Key words:

Basketball, Motor skills, Fundamental skills, Educational video method, Coaching techniques.

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## LIST OF USED ABBREVIATIONS

| NEU | : Near East University |
| :--- | :--- |
| H0 | $:$ Null Hypothesis |
| H1 | : Alternative Hypothesis |
| AAHPERD | : American Alliance of Health, Physical Education, Recreation and Dance |
| EV | : Educational Video |
| TC | : Traditional Coaching |
| MM | : Mixed Methods |
| G (1.2.3) | : Pre-test of Shree Groups Before programs |
| T 1 | : Post-test of Shree Groups after programs Passing Skills |
| X (1.2.3) | : Statistical Package of Social Sciences |
| T 2 | : One Way Analysis Of Variance |
| SPSS | : The Least Significant Difference |
| ANOVA | : The Paired-Samples T Test |
| L.S.D | T. Test |

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## CHAPTER 1

## INTRODUCTION

In an effort to develop more efficient and practical interventions for athletic performance, some behavioral researchers have incorporated a variety of technological innovations. Technology is a popular issue in sports and will continue to play a major role during the next century (Goggin, 1997).

Media studies of the 1950s on distributed closed-circuit television versus live teaching (Carpenter \& Greenhill, 1955, 1958) were among the first to demonstrate that there were no differences between live teachers and televised teachers. However, following Clark's logic, even the effects achieved by sophisticated technologies like those in medical training simulators (Haque \& Srinivasan, 2006) could have been matched in less sophisticated ways. This argument effectively sidelines technology as inconsequential to the mission of postsecondary institutions, or at least relegates it to a secondary role. Of course there are those who have argued on the other side of the issue, usually citing the promise of technology to significantly affect learning and attitudes (Dede, 1996, 2004; Kozma, 1991, 1994; Mayer, 2008).

Videos have become an important part of higher education. It is integrated as part of traditional courses, serves as a cornerstone of many blended courses, and is often the main information delivery mechanism. Several meta-analyses have shown that technology can enhance learning (Schmid, 2014), and multiple studies have shown that video, specifically, can be a highly effective educational tool (Kay, 2012; Allen \& Smith, 2012; Lloyd \& Robertson, 2012; Rackaway, 2012; Hsin \& Cigas, 2013).

Different instruction media can encourage learning process in which plays construct the meaning in terms they person all understand (Iwase et al., 2003; Dugonik et al., 2002).

In addition, videos have been used in cognitive instruction of students by the use of drills, thus freeing the instructor to spend more time with other students needing additional help in physical education (Cicciarella, 1983; Lynch, 2001).

The videos have also been used to help develop skills of problem solving, decision making and an understanding of the concepts of sequence, logic and efficiency (Hurwitz, 1985; Bazillion \& Braun, 1998). All of the preceding uses of the video have involved assisting the instructor to develop the cognitive and effective areas of an individual.

In addition to the use of video to provide performance feedback on athletic performance, video has also been used to provide expert modeling (Hazen et al., 1990).

In 1998, Scott, and Howe tested the effects of video modeling on adult tennis players' ability to return tennis serves. Participants viewed a film of a person serving and were asked to describe it verbally (type, depth and landing). Subjects were then requested to physically model the correct tennis stroke return. When a subject's performance scores reached criterion ( $75 \%$ correct or 45 points out of 60 ) the participant progressed to the next session and the speed of the video was gradually increased. This intervention resulted in a measured increase of 10 points earned on court serves and returns compared to baseline scores. Although the study used only an AB design, the positive results of this study suggest that video modeling is a promising approach and should be further evaluated in additional sports performance research.

A variety of other studies have evaluated video modeling for improving athletic performance. In 2002, Boschker and Bakker investigated the effects of observing a video of an expert wall climbing, a novice wall climbing or just observing the wall on video. Undergraduate students were separated into the three conditions and measurements of percentage of a successful climb and duration of a climb were recorded. Participants who received a video performance of a model (novice or expert) had faster and more fluent climbs. The participants in the novice video condition demonstrated the greatest time reductions to climb the 7meter wall. Unfortunately participants in each condition observed a different climbing technique. Future studies should use videotapes of expert and novice climbers performing the same wall climbing skills.

In 2004, SooHoo, Takemoto, and McCullagh investigated the effects of modeling and imagery on motor performance. University students were placed in a modeling or imagery condition. Before each trial of free weight squat lifts, subjects participated in the training protocol for their group. The modeling group watched a video of an expert performing free weight squat lifts before each trial and the imagery group listened to an audio tape instructing the participant how to visualize performing a squat lift before each trial. Pre to post-test assessments demonstrated that both modeling exposure and imagery exposure resulted in an improvement in body form execution and the number of squats in a set time ( 15 seconds). Future research could investigate the participant's preference for either the modeling or imagery intervention.

Vernadakis et al (2002) reported that using multimedia technology as a teaching aid was effective and profitable in teaching skills as the traditional method. The
researchers investigated the effect of Traditional instruction and Computer assisted instruction method on learning the skills of setting in volleyball. Participants were 32 middle school students of seventh and eighth grade, aged 12-14 years old. The result indicated that all the instructional groups performed similarly with significant learning from pre-test to post-test and there were no significant differences between the groups concerning the knowledge and skill test.

Research on student learning in physical education is somewhat sparse (Wandzilak et al., 1994), even though the student learning experience continues to be recognized as a fertile ground for research in other academic disciplines (Breen \& Lindsay, 1999). There are few studies that specifically address the learning of knowledge or skills in physical education through the use of the educational video (EV), traditional coaching (TC) and mixed method (MM). Therefore, the purpose of this study was to compare three different instructional methods (educational videos, traditional coaching and mixed method) by means of the skill test scores (AAHPERD shooting and passing tests), obtained from three groups of basketball school students aged between (10-12) years.

### 1.1 Statement of the Problem

Researcher find that he has become the traditional method of teaching basic skills in basketball games is not processions for new future in teaching basic skills of basketball games.

For that researcher apply three style of teaching skills, first traditional coaching (TC), second using technology educational video (EV), and third mixed method (MM), mixed the two styles in the process of teaching basic skills in basketball game, starting apply the programs on students for 6 weeks, to find the effect of the three style of teaching skills on male who age between 10-12 years old, To found the effect of each style used in teaching basic skills in basketball game.

### 1.2 Hypothesis

H 1: There is a significant difference in the means between the pre-test and posttest Preference for post-test in basic skills test of three method groups, educational video (EV), the traditional coaching (TC), and the mixed method (MM), in basketball game.

H 2: There is a significant difference in the means between the three method groups, educational video (EV), the traditional coaching (TC), and the mixed method (MM), in the post-test for basic skills test in basketball game.

### 1.3 Objective of the study

The aim of this study is to identify:

1. The researcher aims to prepare two educational programs. The first one contains an educational videos (EV) and the second one mixed method (MM), mix methods (educational video (EV) + traditional coaching (TC)).
2. Disclosure of the differences between the pre-test and post-test of the three methods groups (educational video (EV), traditional coaching (TC), mixed method (MM)).
3. Disclosure of the differences between the three method groups (educational video (EV), traditional coaching (TC), mixed method (MM)) in the post-test of the skill test.

### 1.4 Significance of the study

Comparison between the three styles of teaching, first traditional coaching (TC), second using technology educational video (EV), and the third mixed method (MM), the two styles (traditional coaching + educational video), mixed to find the effect of using technology (educational video) in teaching skills will make basketball players to understand fundamental skill clearly compared to the classical teaching method. In addition, videos have been used in cognitive instruction of students by the use in drills, thus freeing the instructor to spend more time with other students needing additional help.

1. This study will used three styles of teaching basic skill first using technology educational video (EV), second traditional coaching (TC), and the third mixed method (MM), of basketball game, and show which style it's better to work on with the team.
2. This study will prove the effect of using technology educational video (EV) and mixed with traditional coaching, because in educational videos displays a series of images of movements, in addition the voice to explain the performance of skills that make learner more focused, with a simplified explanation in writing notes on skills drills.

### 1.5 Delimitations

Identified study and general is ability results in light of the following parameters:

1. Humanity: the study delimited to 39 male of basketball summer school age between 10-12 years old.
2. Spatial: the study delimited in Sanhareeb sport club in Duhok-Iraq.
3. Temporal: this study is applied in (7 July to 1 September of 2016).
4. The study delimited to using three styles of teaching skills, educational video (EV), traditional coaching (TC), and the mixed method (MM), to learning basic skills in basketball game.

## CHAPTER 2

## GENERAL INFORMATION

### 2.1 Video Concept

Video is derived from the original Latin meaning this word in the Latin language but the term is not limited to the visual side, which includes the visual and audio together (Zhang et al., 2006).

### 2.1.1 The Educational Video

Modern technology means used in the field of communication has made a quantum leap in the chain of evolution and technological progress communication. Some of the means are limited to the presentation of stimuli or recording responses the video combines the stimuli, recording and giving feedback, which made this technique an educational tool for its privileged position in the educational process (Hsin \& Cigas, 2013). Tapes containing material or subjects directly or indirectly related to the education sections can be displayed by the video device. This is to take advantage of the daily events that are displayed on television, where the teacher or trainer records them and displays them to the students in the hall, or tapes containing subjects Directly related to the method of performance of mathematical skill and others, or tapes containing scientific materials through which the teacher can bring the meaning of the lesson, as well as tapes that contain plays that address a subject of study. These tapes can be used during boot for lesson, during presentation, discussion, conclusion or application, for that video tutorial is one of the most modern in our world, and the function of providing audiovisual information according to student responses (kay, 2012). The audio and video are displayed through a screen that is part of an integrated unit consisting of a computer, a means of entering information and storage charges. The instructional video can provide information using video clips at different speeds and fixed frames with text, graphics and sounds. The video tutorial shows video clips, Independent. The presentation depends on the multiscreen system to display the different elements of the lesson. Besides, the video provides the interaction opportunities that provide the student with the ability to control according to his own pace, in addition to the track and sequence and the amount of information it needs (Rackaway, 2012).

### 2.1.2 Educational possibilities for Educational Video

The educational video has technology that allows the learner to watch video sequences at different speeds illustrations of the teacher or skill with a written text to clarify more, the instructional video allows students to learn according to their own abilities and allows for re-editing and revision according to desire. When used as a means of explanation, it can prompt the teacher to work more closely with students and reduce the need for repetition, enjoy students it as they appreciate the value of the visual and visual stimuli that are available and the active and effective nature of their own participation (Choi \& Johnson, 2005). The educational video is able to motivate students who show a passion for using this innovative machine; it is a new fun way to learn more. Some teachers believe that instructional video increases the ability to understand difficult concepts. It can also provide a live database for project promotion and discussion. In this application, the educational video has advantages over traditional resource advantages because of faster data retrieval and database size (Mayer \& Moreno, 2003). The method of instructional video gives students the opportunity to control and participate positively and the learner's response to the components of the program, which allows to take into account the ability of the learner to choose the subject looking for interest and move to more specific lists of choices. Video tutorial provides the opportunity for constructive learning because it supports some of the cognitive processes necessary for learning as well as the effective aspects of motivation and pleasure in learning, the video tutorial technology helps kids focus their attention for a long time to make good progress in the field of difficult concepts and more engaging learning (Brame, 2015).

### 2.1.3 Factors that help to increase the effectiveness of the educational video

Several studies have been conducted on trying to increase the effectiveness of educational video in improving learning, in learning problem solving and above cognitive skills, and this research has reached several factors that help to increase interactive video and the most important. The integration of the video image and the material provided through the instructional video should provide us with an ideal and real form of learning that provides information and skills through real life situations, the program includes a plan of action aimed at directing students' attempts towards the learner to be promoted, give the counseling and guidance tips to learners but this may be of little benefit unless we take into account the results of their responses to provide guidance to them, the program provides learners with permanent reference as part of the same task (Rackaway, 2012).

The mention of goals in the introduction to the program helps to summon the information but does not help in learning rule; learner should be instructed to engage actively with the educational materials provided and to give him an appropriate degree of freedom to control the learning process. The amount of control given to the learner depends on the abilities of the primary learners; the repeated training through instructional video is useful in learning knowledge tasks with lower levels (Mayer \& Moreno, 2003).

### 2.1.4 Video tutorial features

Provide interaction between learner and instructional video in the appropriate language. The possibility of following up the educational material or program for a period of time, it is used as a multi-dimensional database in the form of audio files, images or texts, stimulate students' interest through sound, optical and motor effects and a display system the material is magnified and the learning time is provided, it is used as a source of information, simulation systems, problem solving tools, language of dialogue, educational and sports games. It is a means of achieving education and training for the independent, replay, focus and saves easily. It can be used as a problem-solving tool through tailored programs that train students to face problems and find solutions, the presentation of educational lectures or presentation of mathematical skills (Tanaka et al., 2012).

### 2.1.5 Educational benefits of Educational video

Requires a response from the learner who responds through the keyboard and touch the screen or deal with some other things that are part of the system and linked to it, which works to attract the attention of the learner and suspense. Includes a number of interlocking interoperable means, and works together in proportion and in an integrated system, it displays texts accompanied by audio, video, graphics, and animation in an integrated educational system without the need for a large number of devices. Take into account the individual differences between the learners in which the learner learns and according to his own desire for education. The ability to diversify in lessons means branching into one topic, between learning and reinforcement and the third to acquire skills. Follow up the progress of the learner in the course material by tracking response and identifying the extent of the educational goals his achieved. Also used for various educational purposes like seminars, conferences and scientific and cultural seminars (Vural, 2013).

### 2.2 Basketball sport game

Basketball is team sport and fast game, entertaining and exciting as basketball occupies second place on the world in terms of popularity and practice, while occupies first place in the United States, the match played between the two teams, each of team five players. The team is winner when it is able to score number of points more than other team score. Players score points in shooting big ball inflated with air inside the high goal of the so-called basket at one end of the basketball court (Rains, 2011). The player can advance ball to the basket for a way dribbling (repetition ball hit the ground to bounce to the hand), or passing ball to a player of his team to build attack and progress to score points. Each team is also trying to defensive the other team to stop score points, the sport of basketball was born in the United States of America in 1891. the Canadian Dr. James Naismith, a professor of physical education and coach in the school of international youths in Springfield the State of Massachusetts, introducing players to exercise their activity sports in the gym because of raining outside, and invented a game depends on the roughness little play on, during the mid-twentieth century has become a game basketball sports world's most popular venues in the closed hall. These days millions of fans crowded into the sport clubs, and the fields of competition, to watch their favorite teams. There are millions of others watching these games through the TV screens, basketball is a recreation methods, it also organized mass sport. And can play a minimum number of players have no more than only two players, and all he needs is ball, and basket, play on a flat surface and basketballs require teamwork with quick reactions, and the strength of the prospect. For the tall players and advantage, because they can easily reach close to the target, or shoot on the tall players, and repel bouncing balls. However, the short players have a very important role in the change and dribbling among players (Grundy et al., 2014).

### 2.2.1 Rules of basketball game

Divide the basketball game into four quarters runs for each quarter 10 minutes at the level of international matches or 12 minutes at the level of the USA National Basketball Association League matches NBA, As for matches in college, game divided into two halves two games for 20 minutes each half, while most high school games divided into four quarters of eight minutes each quarter. And it is allowed fifteen minutes to take a break in the middle of the game, while the rest is allowed two minutes after the end of each quarter from other quarters. And it lasts the duration of each period of extra time overtime, which is calculated after the end of regulation time of the match in a draw
to five minutes. The two teams exchanged basket with start of the second half of the match. Added time in the match is the actual time of play, where are stopped when the game clock stops playing. Therefore, the basketball games generally take much more time than a longer time, and usually last for about two hours; each team is composed on the field of five players at a time out of twelve players registered in the list (Rains, 2011). The switching is not operations substitution players are limited to a certain number of players, but can be made only when the match is stopped. And each team's coach oversees development of the performance of players and the development of strategies and plans that plays out the team, along with a number of other members in the team such as assistant coach and team manager and statistical doctor and fitness trainer, allows a limited number of time-outs, which is a request for coaches to stop time and then stop playing and meeting for a short time with all their players to discuss plans. In general, the duration of time-out of not more than one minute only, unless it entails a watershed in advertising for the games televised broadcast, wearing both the men's and women's basketball teams' uniforms consists of shorts and jersey, imprinted on jersey number both side front and back shows clear, and has no parallel to each player or player within a team (Yeh et al., 2017).The players wore sneakers high-top provide more support and durability of the ankle. Usually the difference names and the names of the players and even print the names of sponsors, in tournaments organized on the clothes of the players, controls the management of the game officials consisting of the referee it is called referee in the basketball games for men in American colleges League and in the National Association of American basketball to NBA League and the rule of one or two provisions so-called rulers in football games Basketball Men in the American League and League colleges of the national Association of American basketball plus the rulers of the table, for league of colleges and the National Association of American basketball and many American high schools patrols, the total number of referees on the field up to three governors. But the table referees, are responsible for keeping track of the points which were acquired each team and control the game time and recording fouls individual players and errors collective team and oversee the switch players as well as determine the role of each team in possession arrow possession arrow on the ball and also supervise the stopwatch 24 second time that should the team shoot the ball to basket before finish 24 second (WEI, 2010).

### 2.2.2 Centers players in basketball game

Although the basketball game rules do not specify the stations or positions of the players on the pitch at all, this matter has emerged and developed as part of the game of basketball. During the first five decades of the development of the game of basketball, the players are split centers inside the stadium as follows: Player line of defense, but offensive players, but players in the midfield. However, since the eighties of twentieth century, new centers have emerged for players, more specifically, namely, first player back attack point guard usually the fastest player on the team, and organizing his team to attack and directed by being able to control the ball and make sure it reaches the right player at the right time, second defender shooting the ball shooting guard the payment of a very large amount of shots at the stage of attack also monitors the best player at the perimeter of opposing team in the defense phase, third player petite body attack small forward it is often mainly responsible for making points by the shortest route to the basket and penetration with the ball and dribbling, but in the case of defense, it runs on the acquisition of the bouncing balls of the opposing team's attackers, but sometimes the other roles more effective than that, fourth attack player strong body power forward plays in the attack strongly and often have his back to the basket, and in the defense phase, playing under his basket in a wellknown zone defense or play a defender against his striker team a strong contender body's defense method in a well-known defense mode man to man defense, fifth midfielder center are relying on longer and stronger player in team in this center to score points at stage of attack or for defense the team basket strongly in the defense phase or to acquire the bouncing balls, characterized by descriptions that has been addressed above as being flexible and subject to change, on some occasions, some teams choose to play with three defenders by replacing one of the attackers or midfielder third cannons. The player back attack and defender outstanding center of the goal from more centers that can switch them, especially if marked by players these two centers the good leadership of the team and interpersonal skills with the ball and control it, there are major defensive strategies: zone defense and man to man defense, this involves defense zone on the presence players in defensive positions defending their baskets against any player competitor resides in their area (Sallet, 2005). With respect to the strategy of the defense man to man man-to-man defense, who shall each player defender monitor a particular player of the opposing team and try to prevent him from performing any work that threatens his basket, it is worth mentioning that coverage movements a maneuver which prevents an opponent from
playing legally and quick releases and shortcut to the basket is one of the ways to play offensive task, where processes offer to do a quick work collectively which leads to success in achieving goals. Always the difference in many ways offensive play has planned to ensure not to expect the other teams competing for movements of players on pitch to achieve this, usually a player back attack is responsible for identifying and clarifying the way of offensive play that will be used at the start of any of the attacks, there is no doubt that greater emphasis is placed on the players centers and plans to play defensive and offensive at the game of basketball; so any coach always asks intermediate times during the game to discuss these plans with his players (Puente et al., 2017).

### 2.2.3 Irregularities in basketball game

You can advance the ball toward the opponent's basket through pushed or passed between colleagues or throw or hit or rolled or dribbling, the players need dribbling while running out, the ball must remain inside the stadium, where he lost another team touching the ball before they leave outside the boundaries of pitch most of the ball for the other team. It may not be the ball handler to move two steps without dribbling, and know the offense to walk the ball traveling, as it may not bouncing the ball on the pitch by using both hands or mishandled during dribbling, so doing commits violation know double dribbling the ball. Should not be the player's hand under the ball during dribbling, Reassigned thus makes it irregularities offense carried the ball carrying the ball. Once one team captures the ball in the front half of the pitch, it may not return to its rear area theirown half. It may not be kicking the ball or hit with fists (Sampaio et al., 2015), The violation of all these rules leads to a loss of possession or restart the stopwatch shot clock again if committed by a player defense, when the team attack on the opposing team must convey the ball from their own half to the other half of the stadium opponent within 8 seconds in international matches 10 seconds in the games of National League basketball tournament American NBA also player have to finishing or shooting in discount basket within a specified period of time 24 seconds in international matches, 30 seconds in the games of National League basketball tournament American, NBA, not the player may keep the ball in the half-front stadium located where the goal for 5 seconds during the resistance to player the other team defend him strongly. Also it does not allow the player to stay in Forbidden discount area shaded area or keyhole region key, area under the rear panel of goal and that is similar to shape keyhole for 3 seconds, it is worth mentioning that it has been put these rules to promote more offensively in the game of basketball and
should on player to not objection basket or intercept the ball may be on its way to enter into a basket, or if they are on the edge of basket or if they are above the basket directly and as prescribed by the International Basketball Act and the National Association League of American basketball act, because this will commit a violation known as disability is legal to score a goal. If the Defender is hampered goal, it is calculated shot attempt successful shot. If hindered fellow paid the same goal record, it is the abolition of the goal and continued to play with the right to grant the team defender the ball (Vienneau et al., 2016).

### 2.2.4 Fouls in basketball game

Any attempt would rival in violation of disability through physical contact with him be illegal and call it a foul. Often, defenders commit these errors, and also this does not preclude committed by players attackers as well ( Mitova \& Sidorenko, 2015), the player who is making a mistake against him the ball for the passing again inside the stadium or gets a free throw free throw and one or more if the error against the commission, which in the case of shooting, depending on whether the shot was both successful or not. And awarded only one point in the case to make the free throw which is repaid on the line is 15 feet 4.5 meters from the basket, referee may depend on the discretionary errors calculated for example, through a judgment on whether there is a violation of the rules or not and sometimes fouls are material to the controversy, it referred to as the referee mistakes mechanism and charged different between matches and other and between leagues, and even among the rulers themselves, it is possible account against the player or coach, which show bad in the spirit of sport, through example, objected to the sentence or scuffling with another player, more dangerous, known as technical fault Technical foul include the foul of this error implementation of free throws differ from personal fault, where the other team can choose any of the players to repay these throws and vary Punishment of this error between Leagues. It is possible that errors repeat leads to the exposure of fault of exclusion disqualification of the game is called glaring mistakes that have physical contact with excessive or where player is not intended to play ball errors has not been sporting irrelevant to the spirit or deliberate errors as they are called in the National League the American Basketball NBA and usually exposed the perpetrator of such errors to the penalty of expulsion, if you skip any of the two teams certain errors end within a certain period of time quarter or half in the game four fouls in the American National Basketball Association League and international matches, the opposing team
awarded a free throw or two free throws all subsequent fouls that are committed during this time period, the number of these fouls depends on the nature of league in which games are held. At basketball games of the faculties of United States, if one of the two teams has increased 7 fouls in any of the halve of the game, giving the player who made a mistake against him and one free throw by this rule, if this succeeded throw it followed another free throw performed by the same player, and if you fail the first free throw, the game continues if the team exceeds 10 fouls in any of the two halves of the game, granted opposing team two free throws each subsequent foul is committed in this hemisphere. The player who has committed five errors in any of the international matches including technical fouls or committing six errors does not include technical fouls in any of games of the National Association of American Basketball League, it is excluded from the game does not allow him to update it, and said he was specified number of fouls have been committed to get him out of the stadium but if you make a mistake against a player as he tried to shooting ball in the basket failed this actually, this player is awarded a number of free throws equal to the value that this actually was trying achieved. If a foul has been committed against a player trying to make a normal shot, gets two throws on the other hand, if you commit a mistake while trying to make a three-point shot, then the player gets three throws. If you make a mistake against a player while trying to straighten a shot that managed to make this shot, it usually would be granted this player additional free throws one point, compared to any of regular throws that are implemented in the game, this game could be called the three points of the game because shot could have been achieved by time of equivalent two points in addition to the additional free throw tied one point it should be noted that there are also four points game, and in spite of scarcity of occurrence there are some fouls between the player and ball, also player and other player (Sheffler et al., 2014), (Madarame, 2017).

### 2.2.5 The dimensions of the basketball court

Basketball Stadium: according to international specification matches the length of the basketball court legal 28 m and width 15 m length may vary in nearly two meters, and width nearly one meter, but should be fit to maintain the dimensions. Most of the basketball courts are made of wood, and used a variety of lines of 5 cm width of the division of the stadium into sections, Attached the basket and plate over each end of stadium. They must each plate inside the finish line a distance of 120 cm to be, basket composed of a Ring, Net, backboard And a metal ring collar diameter of 45 cm and a
thickness not exceeding 20 mm and prove Iron episode takes the form of English letter L but inverted and installed on the plate and be with him is parallel to the floor and elevated by a distance of 3.05 m and made two paintings of fiberglass or metal on ring attached net made of cotton or synthetic fabric and are found in the bottom wide enough to slot the ball fall through. Play basketball mediated leather ball inflated with air, the color brown or orange, Basketball legal and weigh between 600 g and 650 g and its surroundings ranging between 75 cm and 78 cm , must ceiling height or another obstacle slung at least 7 meters, lighting must be adequate and consistent and lighting units are placed so as not to affect the vision of the players, the research used basketball court for practicing and learning basic skills of basketball, because of that divide basketball court to parts, for example use under the board that draw black circle in figure 1 use these parts for learning shooting skill and use the center of stadium draw black square in figure 1 use that for learning passing skill, also its better to learn inside the basketball court to save dimensions of the basketball stadium (Sun et al., 2014).


Figure (1) Measurements of basketball court

### 2.3 The Basic Skills in basketball game

Talking about the running and attack on the opponent basket and playing tactics trainer in game of basketball, we miss the important point which should be the player to learn basic skills before starting, because these skills will help the player to easy play and ease to application of coach plans and win the points, from these points stress the player to learn the basic skills and manner of performing clearly because he is the basis of game so we divide into two basic skills offensive and defensive as follows; offensive basic skills in basketball game: shoot, pass, dribble, catch and receive, cut or pivot and screen. Defensive basic skills in basketball game: stance, communicate, ball and their opponent, box out, close down, run with their opponent, block and rebound (Krause, 2008).

### 2.3.1 Offensive basic skills in basketball game

Shooting skill: the ball toward the goal means the process and be throwing the ball by using the one or two hand in order to win points in the discount basket and the success of scoring of any kind on the following factors: the relaxing in body with control the ball, the ability to focus when he shooting, the ability to choose a good area of target for the purpose of shooting, ball rotation the ball must spin around itself on the way to the basket, the angle of launching the ball toward basket, estimate the Angle of shooting ball to basket and follow-up arm towards the ball after shooting, because of the different conditions of the matches and the multiplicity of positions, varied ways in shooting to basket, some of which are conducive stability and of which leads from the movement, or at close range, medium or distant, and therefore the types of shooting department, including the following: constant shot, jump shot, layup shot, hook shot and rebound follow-up shot (Milanovic et al., 2014; Jakovljevic et al., 2016).

Passing skill: the most commonly used method in the transfer the ball inside the stadium and fastest in delivery of the ball to opponent basket, as well as helping to create gaps in the defense team facilitates investment in increasing the attacking team points balance, on the one hand, and on the other hand, Proficiency the team passing ball qualify skill keep the ball in the amount of legal period 24 seconds opening of has a chance to end the game in a few points better from other team, which will contribute to enhancing confidence players in themselves and their colleagues in the team also, because of different playing conditions and diversity of positions, divided passing in basketball game on two main sections included both subdivisions, also comes; Passing using two hands
divided such as: chest pass, bounce pass, overhead pass, below pass two hands and touch pass. Passing using one hand divided such as: bounce pass, pass over the shoulder long pass, the lance pass or baseball pass, below pass one hand, dribble pass, behind the back pass.

Dribbling skill: used to move ball inside the stadium after passing skill as an offensive player can move in any part of the pitch and ball in his possession without committing breach walking, must on team to know the method of performance, reason for that is because the player who is not good dribble not going to be a good striker, found dribbling important skill in offensive, effective in many cases such as; move ball from defensive to offensive Progress towards the rival basket, start implementation of the plan, taking the right place to shooting and escape from defender. Also, dribbling divided on to many types; high dribbling, low dribbling, change direction, change speed, around the player, back and forth, behind back and between legs.

Catch and receive: the skill of catching the ball first offensive skills that must be learned any novice, the first step of steps to learn and master other skills, without mastering this skill player cannot be able to start dribbling or passing the ball the right way, and must alert the athletic novice to the need to spread the fingers on both sides of the surface of the ball for easily catching and not touching ball rest hands, to avoid rebound the ball during receipt when passing to be strong and fast, while the thumb behind the ball opposite sides and close together, to prevent the collision of ball with an open recipient for the moment you receive and what may result from the collision of pain or loss the ball, while supplying arms toward the ball at the same moment, then pulls the ball toward easily obtainable recipient was issued to reduce the momentum and to protect it from an opponent, and linked to skill of keeping the ball skillfully, receiving the Ball, which means a process to control the ball passing of colleague and keep them not to expose it to loss, that mastering this skill means to increase team's offensive against an opponent opportunities and vice versa, because of that coach every day used this skill in training table, receive the ball on chest level, or it may be higher than chest level, and in this receipt will be the direction of fingers towards the top and thumb behind the ball, but if were receiving lower chest level, so the direction of the fingers down and your thumb to the outside, this is accompanied by the process of receiving ball providing recipient one of his feet and bend his knees at angles that vary according to the type of receipt, followed by the recipient ups to his knees and pull the ball off his chest for some reason already mentioned. The most important points that should be highlighted while you hold the ball:
hold the ball with your fingertips, not palms, no pressure on the ball, the ball should be balanced between the hands, bend elbows close to the body, muscles of body should be relaxed, especially the arms and knees, not be tight, head or looking forward and feet are in a straight line or foot advanced on another. Mistakes Common in receiving the ball: catching the Ball by palm not with fingertips, extreme pressure on the ball during reception not looked to the trajectory of ball before receipt, the player not moving toward to receiving the ball, fatigue and psychological turmoil or emotion of recipient are all factors that affect the receiving process.

Cut and Pivot skill: the player cutting to the basket to score points in the discount basket This skill also it is essential because it helps to penetrate defense and rely on speed and on the intelligence of the player to choose right time to enter discount area, so must the player exercise to move on cutting, but two-way in order not to located in irregularities or loses possession of the ball, must use your Pivot foot to move around, with the basketball if you are not dribbling. Think of your pivot foot, as having its toes anchored to the floor. You can spin around or "pivot" on that anchored part of your foot, but you cannot slide or lift this foot unless you are passing or shooting, Doing so will be a travelling violation. To establish which foot you can use as your pivot foot, just remember that the first, foot to be on the ground when you catch the ball is you pivot. The last foot to be on the ground when you stop dribbling is your pivot if you jump up, catch the ball, and land on both feet, you get to choose. Do not slide, lift, or change pivot feet. You will get called for, traveling and lose possession of the basketball. The mistakes is a raise the legs in case of rotation to pass the ball or scoring, when you cut to basket and lifted the leg, which was based on them and cutting on the player of discount team and push the player when entering to the area.

Screen skill is also one of the offensive skills performed by the striker player, who has not the ball, this player start screen defender player, order to facilitate the crossing of his friend, acquired striker of the ball, cutting to basket for more easily and scoring points in the discount basket. The mistakes is catch the defense player instead of Screen, push the striker player instead of screen and the player screen wrong side, which is not important to screen defense player.

### 2.3.2 Defensive basic skills in basketball game

Stance in court: must control the movement of the feet and balance of the body it is the key skill to be moving faster to skip forward and skip zone defense to help the team in the region defense to close zone to not score points. Communicate in words: In this skill player continues with each other's as they covered the area of defense and communication between each other to stop the opposing team's attack and cover each hole in defense. Watching to the ball and defender should follow pass between offensive players and know the transformation, to cover attack plan that start from offensive team, to not give them to shot easy or send the ball to dangerous player to scoring points. Box out after shooting : should players move to pursue the ball after shooting striker team and work of a barrier between ball and player attacker and out-zone thus covering zone area, here the defenders be on form of a closed box to covering zone area to follow the ball fallen from the top of basket. Close down the defenders closed end of stadium, is one of the dangerous areas to defense team, because it is close to zone when entering a player to the basket, it be difficult to stop him so we avoid this problem and cover zone of basket. The running with the opponent: Should defender player mild pressure on striker player, preventing it from receiving the ball or difficult to receiving ball from the colleague and cover to slow the attack process and close the way on striker player who do not has ball. Block is performed, after a shot is attempted, the defender succeeds in altering the shot by touching the ball, in almost all variants of play, it is illegal to touch the ball after it is in the downward path of its arc, known as goal tending, it is also illegal under NBA and men's NCAA basketball to block a shot after it has touched the backboard or when any part of the ball is directly above the rim, under international rules it is illegal to block a shot that is in the downward path of its arc or one that has touched the backboard until the ball has hit the rim. Rebound the ball bounces from basket, defender player start to follow up ball well and timing the place and time of downfall the ball in court to covered and jumping high to catch ball and the takeover, to start new offensive plan on defender team and scoring point to win in the game (Sachanidi et al., 2013).

### 2.4 Explanation the two basic skills (Shooting and Passing)

Shooting is considered the first skill which a team can depend on to win the match and progress in achieving tournaments. The final outcome of all the basic offensive skills since all the offensive manipulations must have shooting accuracy and scoring points that lead to winning of the team. This shows the importance of shooting, that's why coaches tend to teach this skill following all the methods and techniques to develop the performance of the player while performing this important skill in the game.

### 2.4.1 Types of shooting in basketball

Constant shot: this type of shooting is usually performed in a close distance from the goal zone area the open offensive player shoots the ball when a clear shot and scores two points. The technical performance for the constant shot skill is the students will stand facing the basket. The right leg will lead the left one by a comfortable distance if the student is going to shoot with the right hand and vice versa, the student will place the ball on the fingers of the aimed hand to the basket with a flexed arm near the elbow and the upper arm parallel to the floor with bending the wrist back until the ball rests on the fingers of the hand, the other hand will support the ball from the side in a way that doesn't obstruct the look to the basket, bend the knees a little to boost the shot of the ball to the basket, smoothly extending the knees and straightening the aimed arm high in a same time followed by additional wrist movement and all the above steps are done in a smooth continuous manner. The instructive steps for the constant shot skill are making a pattern for the move, every student will take the basic shooting position and all the wrong positions will be corrected, the students stand in two facing rows. After receiving the ball from the opposite fellow, the student takes the shooting position, repeat the earlier step with shooting, the students stand facing the basket on a distance of about five meters and they starts shooting, making sure that they take the right initial position, the students stand in two lines behind the free throw line, and the students in the two lines contest on the free throw shot, the students stand in two lines, the first one behind the base line and the other one before the midcourt line and the student move from midcourt towards the restricted area and stops there and shoots, the base takes the ball and pass it to midcourt line then runs and stands in that same line (Erculj \& Strumbelj, 2015).

Jump shot: this type is considered one of the most important types of shooting and the most used one in basketball game, that's because it's very hard to prevent the player from shooting while jumping in the air. The technical performance of the skill is bending the knees with lifting the heels then pushing the floor with the two insteps to jump up in a perpendicular direction to the floor, during jumping, putting the ball overhead and on the fingers which will push it later while supporting the ball with the other hand, the student reaches his highest height, pushes the ball with his fingers with extending his arm up and to the front towards the basket and continues with moving his wrist to the front down and landing on both feet at the same time. Also, instructive steps of the skill: Jumping high in an attempt to touch the backboard with both hands, Jumping high in an attempt to touch the backboard with both hands more than one time in the same jump, Jumping high in an attempt to touch the backboard, the ring and the net, the previous exercise after running and jumping with both feet, running to receive the ball from the fellow. Then stop, the feet should be in a parallel position for jumping up followed by shooting the ball to the fellow, running to receive the ball from the fellow. Then jumping up and shooting from under the basket with repeating the exercise and increasing the distance from the basket each time, dribbling with the ball then stop to jump up and shoot the ball.


Figure (2) Jump Shot Skill

Layup shot: this type is used when the player heads towards the basket and scores two points. The player should be close to the basket. When this skill is performed, the player takes two steps then shoots the ball towards the basket. Sometime the player is close enough to touch the backboard while scoring. The technical performance of the skill: the student gets close to the basket, must keep the ball against his body and up close to his
chin, the student heads towards the basket using big steps, the fingers should be behind the ball during the shooting, the shooting hand should be as close as possible to the basket in its highest height, focusing the sight on the specified point and shooting while directing the ball by the fingers to the edge of the facing ring. The instructive steps of the skill: the basic moves that make this skill. Then the trainer teaches the students each move and links it with the previous moves taught. This method is the best for the students in secondary school the skill is usually divided into two units. The first unit includes the steps towards the basket and the second unit includes aiming and shooting the ball, running towards the basket from an angle of approximately 45 degrees, in an attempt to touch the backboard after jumping by one of the feet, medical ball is placed on floor and the student will try to pass over it by a high step which will be the first step before jumping high, the previous exercise is repeated with increasing the speed of approaching the basket, after learning the steps of approaching the basket, the trainer moves to teaching how to aim and shoot from all the directions near the basket, link the approaching and shooting, the student runs to receive the ball and performs the usual steps, repeat the exercise for the opposite direction so that the student learns the layup shot from both directions.

Hook shot: this type of shooting also is used when the player heads towards the basket and shoots the ball into the basket. The same technical and instructive steps of layup shot could be used to teach this skill.

Rebound follow-up shot: this type of shot is used when a player shoots the ball and someone follows up with the ball and run towards it when it doesn't enter the basket and rebounds, the player jumps and continues the shot in the air and scores. Technical performance of the skill is the correct prediction of the place and the angle that ball rebounds to from the basket, good timing to jump and get the rebounded ball, Jumping high to meet the ball at the highest point from where it rebounds the ring or the backboard, the backboard could be used to bounce the ball from the board to the basket. And that depends on the angle of the bouncing, student's body should be fully extended during the jumping, his arms too and the feet should be opened. Instructive steps for the rebound of skill is standing position, continuously pushing the ball up with the two hands during jumping up, the previous exercise using the right hand only, then the left hand only, the same exercise while walking, then while running, Jumping high and touching the backboard with the two hands then switching between right and left hands, continuously following up with the ball on the backboard and making sure that the two arms are fully stretched up and the ball is controlled only by fingers and the wrists, the ball from below
to the backboard from a distance of two meters then approaching by jumping to follow up with it, throwing the ball from below to the backboard then jumping to follow up with the ball on the backboard then to the basket alternately and the previous exercise with a negative competitor then with a positive one.

### 2.4.2 Types of Passing in basketball

The passing is process of throwing the ball with accuracy from one player to another to avoid its being cut by the opponent and secure its way to the goal opponent's basket or it could be defined as a process of transferring the ball from one offensive player to another offensive player in a good position to advance and shoot. The performance of the pass depends on the ability of the recipient and his speed and direction, also on the time that the passer takes to pass the ball and on his condition if he's constant or moving. Passing depends on the following basic points: The nature of the recipient and his ability, the speed and the direction of the recipient, the time taken for passing and the speed and the direction of the pass if the passer was moving (Parimalam \& Pushparajan, 2014).
-The most important points that need to be noted during the passing:

Depending on the condition of the defender's feet and his condition from the court, do not pass the ball unless you are sure that the opponent has not chance to cut it, determining the recipient player is very important for the passer, high passes against short players and bounce passes against tall players, passing fast but without affecting the accuracy, the purpose of passing is to deliver the ball to the chosen recipient fast without stumble in the path of the ball, passing to the long distances needs force and speed while passing to short distances needs flexibility, the player should know all the types of the passes and when to use each one of them, passing requires both the passer and the recipient's attention, most of the passes should be performed so that the ball is received between the chest and the waist.
-Passing in basketball is divided into two main sections:
The passing with both hands, this section is sub-divided such as chest pass, bounce pass, overhead pass, below pass both hand and touch passes. The passing with one hand, this section is sub-divided such as bounce pass, over the shoulder pass long pass, the lance pass or baseball pass, below pass one hand, dribble pass, behind the back pass.
-After listing the types of passing, this research will illustrate in a simple way some of the most commonly used type of passes as follows:

Chest pass: the initial position for this move is when the ball is held with both hands close to the chest and the two elbows pointing downwards, the two knees in a flexion condition and the feet separated, and the technical performances, the student will pull the ball downwards and to the front then up in a circular way, the student will extend his arms to the front and at the same time pushes the ball with his fingers like a whip move downwards, and stepping one foot to the front to continue the move, the final position would be, one foot to the front and the two arms extended to the front in the direction of the ball, the two wrists flexed downwards and outside and the look in the direction of the ball._Also, the instructive steps, making a pattern for the move, the student holds the ball and continuously makes a circular move in front of him below the chest, the students face the wall and repeatedly pass the ball to the wall and receive, two students face each other and pass the ball to each other and increase the speed gradually, the previous exercise with stepping one foot to the front while passing. And the initial position for the body is separate feet and slightly flexed knees, passing with walking; the passing should be done after one step from receiving, passing with running, the passing should be done after one step from receiving.


Figure (3) Chest Pass Skill

Bounce pass: this passing skill is very important when gaining experience and skill and helps the player to be superior on his competitors. This sort of passing is very efficient when you need to perform a low pass near the defender to deliver the ball to your fellow.

The technical performances such as, the trick is to pass the ball under the defender's extended hands, bend your knees and extend your hand to the side of your body to gain the good area and angle to perform the pass, passing is the restricted area because it's the best and the fastest way to deliver the ball such as, the instructive steps, could be performed with one hand or two, use your fingers to push the ball down near your fellow, the ball will slow down after bouncing; therefore, aim to hit the floor in about two thirds of the distance to your fellow, this will decrease the chance that the defender cut the pass, focus on the recipient while performing this pass.


Figure (4) Bounce Pass Skill
Overhead pass: this type of passing is used when the defender is short also when there is a counterattack where the attacker passes the ball to his fellow in the opponents' area. This skill could be performed with one hand or two depending on the situation as follows: the technical performances such as, the initial position the hands are fully stretched up, the student pushes the ball with his wrists and fingers to the front, the student keeps the same position so that he continues the pass, the student makes one step to the front to keep his body balanced. The instructive step, the trainer makes a pattern for this skill and explains the right position for the move; the student holds the ball and takes readiness position then extends his knees and the arms up with the sign of the trainer the student returns to hold the ball up high, the student face the wall in a distance of one meter holding the ball with extending the arms up high then pushes the ball to the wall repeatedly with his fingers and also bending his wrist to the front while pushing the ball, same exercise between two students facing each other on a distance of four meters, the
previous exercise with increasing the distance and speed, the previous exercise with having a negative opponent then a positive one. Also, over the shoulder pass with one hand such as, the technical performances, the student pushes the ball fast in the direction of the recipient fellow with extending the arm in the direction of the ball in a connected move with the wrist and the fingers, the rear foot will move to continue the pass and transferring the weights of the body on it to keep the balance after the pass. The instructive steps, the trainer presents a pattern for this skill and shows its importance and its uses in the game, the students take the readiness positions for performing the pass, passing between two students facing each other on a distance of 6 meters, the previous exercise with increasing the distance to 10 meters.

Below pass skill is used near defenders and at $15-$ to 18 -foot distances. It may be an air or bounce pass and should be used from the triple-threat position starting position (needed for power), the passer should work one side of the defender's body, especially past the ear, where the biggest gap usually appears, and make the pass above or below the defender's arms after finding an opening. Vertical fakes are used as players read the defender, players should fake low and pass high (air pass) or fake high (maybe a shot fake) and pass low (bounce pass), reading the defender's arm position and making short, quick fakes. The first look is always past the ear, using an air pass when the defender's arm is down.

Touch pass, the ball from underneath, annexes stretched down a little bit in front of body, push the ball with the fingers a simple push in the direction of the recipient in the level of his torso. The instructive steps, the correct position catch the ball, push the ball in front of the chest to almost half a meter distance, students stand in the form of two tugboats then tries the first student in the rear locomotive, approaching the colleague to half a meter distance where they stand and pass the ball to him simple batch, hold the ball and passing from the stability, according to the technical steps of the skill.

### 2.5 AAHPARD testing

American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD) Functional Fitness Test was designed for adults over the age of 60 years. The test items are designed to measure the fitness capacity of the low fitness elderly who are not yet frail, and described in a test manual by Osness (1996). The tests measure body composition, flexibility, agility, coordination, upper body strength and aerobic endurance.

The tests were designed so that they could be administered by professionals and clinicians in the field who lack specialized measurement equipment, training and resources. Also read a discussion about testing the elderly.
-These are the test components of the AAHPERD Functional Fitness Test.

Ponderal Index a height-weight ratio which serves as an index of body composition, sit and reach test measuring flexibility of the trunk/leg, agility test testing agility/dynamic balance, rising from a chair and maneuvering around cones, soda pop test an arm and hand coordination test, in which you turn six soda pop cans over in a specified order, one at a time, as quickly as possible, arm curl test a seated biceps curl test which measures muscular strength/endurance of the upper body and 880 yard walk test of aerobic endurance, walk the distance as quickly as possible (De Chaves et al., 2016).

### 2.6 Literature Review

There are some studies regarding for Shooting and Passing skills and these includes a study by Jaewon, in the studying aimed to identify the influence of the reactive video based on computer on the capability of teachers of the physical education in analyzing and performing the kinetic self-skills in tennis, the researcher used the experimental method, and the studying group included 12 students of Colorado university, they were randomly divided into two groups experimental group and control group, then the results indicated that the use of the reactive video based on computer has a big effectiveness on the learning of teachers of the physical education and their capability in analyzing and performing the kinetic self-skills in tennis comparing to the traditional method (Jaewon, 1993). The study conducted by Vernadakis, used multimedia technology in teaching volleyball skills to 32 middle school student of $7^{\text {th }}$ and $8^{\text {th }}$ grade, aged between 12-14 years old, Instruction, practice and testing for this study were held on 8 week, the groups met two time in week, it take 40 minute, the sample research became from two groups each group 16 student, first traditional method TI, compare with second group computer-assisted instruction CAI, the researcher found there are significant between pre-test and post-test for CAI group, the results suggest that using multimedia technology as a teaching aid is as effective and as profitable at teaching skills as the traditional method, For statistics test used ANOVA (Vernadakis, 2002). Also, in the study of Scott, in the studying aimed to compare between the static images and the dynamic ones in basketball, The researcher used the experimental method in gaining skill to two groups; one of them used the
narrating way with the static images and the other group used the narrating way with dynamic images. The studying group included 12 basketball players from Idaho University, of the age of 18 years they were randomly divided into both groups. The results showed that the professional performance level of the group of the dynamic images was better than that of the static images group, and that presenting various means of the dynamic images before training gives better results than the training before presenting the educational static means (Angorla Scott, 2005). The study by Papastergiou and Gerodimo, This study involved 88 undergraduate students. A pretest/posttest research design was followed. Significant increases in students' basketball knowledge were found. However, the web-based multimedia course in combination with conventional face-to-face instruction was significantly more effective than conventional face-to-face instruction alone in increasing students' cognitive learning regarding the sport of basketball, at the same time being well-accepted by the students. These findings support the effectiveness of blended learning for PE at higher education level as well as the acceptance of this mode of learning by PE students (Papastergiou \& Gerodimos, 2013). The study by Lotfi \& Mohammadpour, this study participated 40 male adolescent, After the pretest, participants attended the training during the ninth session at 3 weeks and 3 sessions per week, training and testing sessions involved 30 and 15 shooting attempt to the archer's target, respectively. transfer and retention test 72 hours after were taken. The results showed that among the four groups in the acquisition process, retention and transfer, there was no significant difference in $\mathrm{P} \leq 0.05$. The results showed that all groups had similar improvements. Totally we can say that there is no significant difference between the combination of different patterning models with physical training and exercise alone in acquisition and learning archery's skill (Lotfi \& Mohammadpour, 2014). The study by Layne and Yli-Piipari, this study examined the effect of sport education model on university students $\mathrm{N}=25$, 22 males, 3 females basketball game performance and content knowledge of a physical activity course, results revealed that students in the sport education group improved significantly in their offensive game performance and content knowledge compared to a traditional teaching model. In addition, the game efficiency of the sport education group did slightly improve while the students in the traditional group did experience a decrease. These findings suggest that the sport education model is an effective pedagogical approach for improving game performance and sport content knowledge of university students (Layne \& Yli-Piipari, 2015).

## CHAPTER 3

## METHODOLOGY

### 3.1 Method of the research

The researcher has used the experimental method for being appropriate to the nature of the research's issue.

### 3.2 Sample of the research

Thirty nine $\mathrm{n}=39$ students boys $10-12$ years of age selected for this study by random sampling method, enrolled in the basketball summer school held in the Sanhareeb Sport Club Duhok /Kurdistan region of Iraq. Participants were randomly assigned to one of the three different teaching methods: TC, MM and EV creating three independent groups of 13 students. All participants had no formal training on learning the skills of shooting and passing in basketball. Prior to group assignments, participants were orientated to the purpose of the study and participant requirements. Following the orientation, informed consent was obtained from each participant. Instruction, practice, and testing for this study were held on six separate and successive weeks. The groups met for 45-minute, 4 times each week in an indoor gymnasium.

### 3.3 The experimental design

Designing the equivalent randomly chosen groups which have the compacted and controlled pre and post observation, Both of the experimental designs can be in the following way clarified (From 1).
-The symbols shown in the design indicate the following:

G1= first experimental group
G2= second experimental group
G3= third experimental group
$\mathrm{T} 1=$ pre-test of shooting and passing skills
$\mathrm{X} 1=$ educational video program EV.
$\mathrm{X} 2=$ program prepared by the coach Traditional coaching, TC
X3= mixed method Educational video + Traditional coaching, MM.
$\mathrm{T} 2=$ post-test of shooting and passing skills.

(Form 1) The experimental design of the research

### 3.4 Means of collecting information

### 3.4.1The personal interviews

The researcher has made personal interviews with some of the specialists in physical education and basketball to get benefit of their scientific opinions about the information of the current studying, in terms of the skills and physical tests, and the educational programs prepared by the coach (see Appendix 1).

### 3.4.2 Questionnaire

The special questionnaire to determine some of the physical and dynamical labels affecting the learning of Shooting and Passing skills in basketball and the suitable tests for it, a questionnaire was prepared of appendix 1 and was distributed to the experts and specialists in athletic training science, methods of teaching, measurement and test, the dynamic learning and basketball appendix 1 in which to determine the most important physical and dynamical labels that effect on learning Shooting and Passing skills in basketball and their suitable tests, for the equivalence of the three groups, on which most of the experts agreed in the rate of $75 \%$ and even more. Therefore, the researcher depended on this rate $75 \%$ and the percentage because of the agreement of the experts and the specialists on the most important physical and dynamical labels and their tests, clarified in (Table 1).

### 3.4.3 Measurements and Tests

1. The Length and the Mass, with counting the Age

The researcher must create equivalent groups at least for those related to the variables of the research, therefore the operation of fulfilling the equivalence among the three research groups was accomplished to control the variables using the test of one-way contrast analysis ANOVAs, whish considered as a pre-measure of the three research groups, and the equivalence operation included the following variables, clarified in (Table $2)$.

- The equivalence of the time age measured by year.
- The equivalence of the length measured by centimeters.
- The equivalence of the mass measured by kilogram.

2. The equivalence in some labels of the kinetic and physical fitness that affect the learning of Shooting and Passing skills in basketball.

The researcher gained the most important physical and dynamical labels and their tests, and calculated the relativity importance in the logical arrangement and sequence to execute it according to the specialists opinion in the athletic training science, measurement and test, and kinetic learning and basketball, the researcher made the equivalence operation among the three research groups in some of the physical and dynamical labels affecting the learning of Shooting and Passing skills that's nominated and their tests as the following way:

- Abdominal crunch: the test of sitting down after waking up, drape the knees to the maximum number for 10 seconds.
- Push up: the test of standing still on the ground, drape and extend the arms to the maximum number for 10 seconds.
- The explosive power of feet: the test of the vertical bounce of settlement.

The researcher has used the test of ANOVA analysis to ensure the equivalence among the three research groups in the tests of the chosen physical and dynamical labels according to the results clarified in (Table 3).
3. The equivalence in the shooting and passing skills in basketball

Each game or any sport activity, there's a certain rule that on its basis the physical movements are done, the researcher followed the following steps:

- Giving an introductory lecture for the research sample explanation and presentation for both skills of shooting and passing in basketball under consideration in order to make a clear picture of it for the learners.
- Giving enough warming-up for the research sample 15 minute.
- Giving each learner two experimental tries and for each skill.
- Giving each learner two test try and for each skill of kinetic skills as a pre-test for the three research groups.

The researcher has used the test of ANOVA analysis to shows the summary of the contrast analysis among the three research groups in the pre-test in the learning both skills of shooting and passing in basketball clarified in (Table 3).

### 3.5 Skill Test

### 3.5.1AAHPERD shooting skill test

The AAHPERD basketball test Strand and Wilson, 1993, was used to evaluate the shooting ability in basketball, to determine the reliability and validity of the skill test. This skill test was appropriated for middle school and high school students. One tester was needed for the successful completion of the test. Testing stations were prepared as shown in figure 5. Five markers, from which students had to shoot, were placed on the floor. Students shot from 12- foot marks. Shooting spots A and E were measured from the middle of the backboard; those for $\mathrm{B}, \mathrm{C}$ and D were measured from the center of the basket. Each shooting spot marker was 2 feet long and 1 inch wide. During the test, the student had basketball in hand, stood behind the shooting spots. On the "ready, go" signal, the student shoots, retrieves the ball, dribbles to another spot and shoots again. The student must attempt at least one shot from each of the five spots and must have at least one foot behind the marker on each shot. Four lay-up shots may be attempted, but not two in succession. The student continues the attempt to score until "stop" is called. All students had three trials of 60 seconds each; the first trial was a practice trial.

Two points were awarded for each shot made, either a shot from behind the shooting mark or a lay-up. One point was awarded for any unsuccessful shot that hits the rim from above, either initially or after rebounding from the backboard. No points were awarded if a shot was preceded by a ball-handling infraction. If two lay-ups occurred in succession, the second got no points. Only four lay-ups were attempted; any lay-up in excess of four scored as zero. Failure to attempt shots from all designated shooting spots voided a trial. Voided trials had to be repeated. The test score was obtained by totaling the two trials.


Figure (5) Shooting skill test

### 3.5.2 AAHPERD passing skill test

The AAHPERD Basketball Passing Test This test was chosen because it is an appropriate test for assessing basketball passing skills. The test was validated by the American Alliance for Health, Physical Education, Recreation and Dance in 1984, using senior high school students. The test retest approach computed reliability coefficients of .84 to .97 so the test is both valid and reliable. The test also required the participants to pass the ball quickly and basketball (Krause et al., 1999). Figure 6 show the diagrammatic representation and set up of the test, which required a smooth wall surface of 30 feet.

Each station for the passing test was prepared as shown (Figure 6). A restraining line 26 feet long was marked out on the floor 8 feet from and parallel to the testing wall. On the testing wall six boxes measuring 2 feet by 2 feet were marked out all 2 feet apart. Moving from the left side of the testing wall, targets $\mathrm{A}, \mathrm{C}$ and E have their base 5 feet from the floor while B, D and F have their base 3 feet from the floor.

The player stood behind the 8 -foot restraining line, holding a basketball and facing the far left wall target A. The experimenter then played the CD , which emitted a threebleep countdown, and the fourth bleep signaled the start of the test. Following the fourth bleep, each player performed a chest pass to the first target square A, recovered the ball while moving to the second target square B performed a chest pass to the second target B. The player then continued this action until they reached the last target F. While at the last target F , they threw two chest passes then repeated the sequence by moving to the left passing at targets E, D, C and so on. The only modification to the test was that it continued for just thirty seconds. Only chest passes were allowed.
-The scoring of the test was as follows:

- Two points 2 were awarded for each chest pass that hit the target or on the target lines.
- One point 1 was awarded for every pass that hit between the targets.
- No points 0 were awarded if a player's foot was on or over the restraining line, or if a pass other than a chest pass was used.

The test score was obtained by totaling all the points scored over the duration of the 30 thirty-second test.


Figure (6) Passing skill test

### 3.6 The devices and tools used in the research

1. Screen TV. (3*3) M ( 1 ) number
2. Laptop computer
( 2 ) number
3. Medical weight scales
( 1 ) number
4. Hour electronic timing
( 5 ) number
5. Basketballs
(42) number
6. Swedish bench (flat)
( 3 ) number
7. Whistle
( 4 ) number
8. Measuring ribbon (50) M
( 1 ) number
9. Adhesive tape (20) M
( 2 ) number
10. Cones
(10) number

### 3.7 Time and place of performing the experiment

1. Time of performing the experiment

This variable was controlled by subjecting the three experimental groups to one period of time, in which the experiment took 6 weeks, in each week 4 four educational units for each group, which started on 7/7/2016 and ended on 1/9/2016.
2. The place of experiment

The educational units of the three research groups were practiced in the inner hall which is dedicated to basketball of Sanhareeb sport Club/Duhok.
3. The educational material

They depended on basketball coaches of Sanhareeb Club to teach the three research groups, four educational units in each week and supervised by the researcher.

### 3.8 Educational programs

Throughout looking at scientific sources and the previous studying and researches in his research field, besides his experience in basketball, the researcher prepared the educational program units, in which divided the three educational programs as follows:

Note: The time of the training unit sections of the three groups related to the section the general preparation, special preparation and the concluding section of the educational unit are equal in time and the nature of the general and special exercises, it was 20 minutes for all sections, and the specific time of the educational and practical section was 45 minutes. The researcher provided the inner hall with laptops, after installing the educational programs of the shooting and passing skills on all devices, also 45 minute divided in to two part, the first one its educational part it take 10 minute for each group and give information about the skill, the second one is practical part it take 35 minute for each group, therefore all groups it take same times for each part.

## 1. The first group Educational Video EV

-It consists of two educational parts as well (Educational and Practical):

- The educational part: The researcher prepared the educational part according to the educational video technique, in which it included the script, sound, images, cartoons and visual parts of the levels and sections of the skill consequently. The video presented one of basketball professional players performing the searching skill. He repeated the performance in different corners. Those shots concentrated on some important details and points like the hand or the shape of the legs stem and the angle of leaning the body and sight besides the position of the feet, and ensuring to use the sound to explain each skill, this part it is 10 minute.
- The practical part: After that the coach allows the players to try practicing the learnt skill, he doesn't interfere in correcting the mistakes, but he only determines the type of the mistake and asks them to review the educational video and repeat the performance, this part it is 35 minute.

2. The second group Traditional coaching TC
-It consists of two educational parts as well (Educational and Practical):

- The educational part: in which the coach explains the educational skill to the players in his own way depending on self-experience and he practices the skill himself or asks a skill full player as a model to practice the skill in front of the learners many times meanwhile the coach explains the parts of the skill, this part it is 10 minute.
- The practical part: in which the coach gives the chance to the players to practice the skill meanwhile he notices the performance and gives advices and directions to the players to correct their performance and make it reach the best, this part it is 35 minute.

3. The third group mixed method MM, Educational Video EV + Traditional coaching TC.
-It consists of two educational parts as well (Educational and Practical):

- The educational part: The researcher prepared the educational part according to the educational video technique, in which it included the script, sound, images, cartoons and visual parts of the levels and sections of the skill consequently. The video presented one of basketball professional players performing the searching skill. He repeated the performance in different corners. Those shots concentrated on some important details and points like the hand or the shape of the legs stem and the angle of leaning the body and sight besides the position of the feet, and ensuring to use the sound to explain each skill, in this part, the coach interferes with his explanation of the skill, besides using a real pattern to practice the skill in front of the players, this part it is 10 minute also divided in to two 6 minute shows education video 4 minute coach explain by give example.
- The practical part: After that the coach allows the players to try practicing the learnt skill, and he interferes in correcting the mistakes and to repeat the performance. And sometimes he allows them to review the educational video as well, this part it is 35 minute.


### 3.9 Exploratory experiments

The Researcher made the exploratory experiments on a sample out of the research sample and where 6 players in order to reach to accurate results before fulfilling the educational programs, as follow:

1. The first exploratory experiment

The researcher made the first exploratory experiment on Thursday and Saturday 79/7/2016 for the physical labels tests, supported by the work team of (see Appendix 2).
-The aim of this experiment was:

- Ensuring the relevance and clarification of the instructions of the research sample tests.
- Ensuring the logical sequence to make the chosen tests in the research.
- Ensuring the capacity and ability of the supportive work team to fulfill the measurements and tests.
- The validity of the devices and tools used in the tests.
- Counting the required time to execute the tests.

The results of the experiment made an obvious image to the researcher and the work team of the nature of the work and its application way.
2. The second exploratory experiment

The researcher made the second exploratory experiment on Sunday 11/7/2016 to the two educational programs. And the aim of it was:

- Ensuring the validity of both educational programs
- The relevance of the educational unit's time and their divisions for the research sample.
- The validity of both educational programs sections and the response of the sample to them.
- Introducing the mistakes and the expected difficulties during the fulfillment.
-The results of the second exploratory experiment were:
- The validity of both educational programs to the research sample.
- The relevance of the educational unit's time and their divisions to the research sample.
- Unifying the repetitions and times to the research sample.
- Avoiding some mistakes and difficulties throughout fulfilling the experiment.


### 3.10 The pre-tests and post-test of the skills

1. The pre-test of the skills

The researcher made the pre-test for the skills on Wednesday 13/7/2016 for equal between the three groups and prepared for the program study and show that all groups they are equal in everything.
2. The main experiment

The educational programs were start on the three research groups on Thursday 14/7/2016 till 29/8/2016 in which 4 educational units per week for each group.
3. The post-tests
-The evaluation of the skill performance

The post-test of the shooting and passing skills of the three research groups was made on Thursday 1/9/2016 by giving each student two try and for each skill of research skills, the recording the result of the test.

### 3.11 Statistical methods

The researcher used the program of the statistical packet of the social sciences SPSS static's 18 in handling the results, the statistical methods are:

- The arithmetic mean M.
- The standard deviation SD.
- The percentage P .
- The rate of false F.
- The test of the ANOVA, select option Descriptive and L.S.D.
- The Paired-Samples T. Test.


## CHAPTER 4

## RESULTS

In table. 1 show the percentage of the agreement for experts and specialists on determining the most important physical and dynamical labels affected on learning the skills of shooting and passing in basketball and their suitable tests (Agree $\times 100 \div$ All $=$ the rate of the agreement).

Table. 1 The percentage of the agreement for experts and specialists on determining the most important physical and dynamical labels affected on learning the skills of shooting and passing in basketball and their suitable tests.

| The physical and dynamical labels | The physical and dynamical tests | The no. of the specialists |  | The rate of the agreement \% |
| :---: | :---: | :---: | :---: | :---: |
|  |  | All | Agreed |  |
| Abdominal crunch | Repetition abdominal crunch in 10 seconds | 15 | 14 | 93.33 |
| Push up | Repetition push up in 10 seconds | 15 | 12 | 80.00 |
| The explosive power of feet | The horizontal bounce of the settlement | 15 | 13 | 86.66 |

As seen in the table 1 form of the present study has been reported by statistical method of the percentage in agreement for the experts and specialists, which the number of all specialists is 15 , the agreement on the physical and dynamical labels for abdominal crunch test in 10 second is 14 specialists agree and the rate of the agreement is $93.33 \%$, the push up test in 10 second is 12 specialists agree and the rate of the agreement is $80.00 \%$, the explosive power of feet test in the horizontal bounce of the settlement is 13 specialists agree and the rate of the agreement is $86.66 \%$.

In table. 2 show the summary of the contrast analysis results among the three research groups in the variables of Age, Length and Mass.

Table . 2 The summary of the contrast analysis results among the three research groups in the variables of Age, Length and Mass.

| Variables | Groups | $\bar{x} \pm$ S.d | F | P |
| :---: | :---: | :---: | :---: | :---: |
| Age | EV | $11.25 \pm 0.61$ | 0.21 | 0.80 |
|  | TC | $11.34 \pm 0.57$ |  |  |
|  | MM | $11.19 \pm 0.61$ |  |  |
| Length | EV | $152.84 \pm 5.12$ | 0.39 | 0.67 |
|  | TC | $151.30 \pm 7.33$ |  |  |
|  | MM | $150.61 \pm 6.88$ |  |  |
| Mass | EV | $43.46 \pm 4.07$ | 2.20 | 0.12 |
|  | TC | $46.69 \pm 6.10$ |  |  |
|  | MM | $43.00 \pm 4.22$ |  |  |

$\mathrm{P}=0.05$
Table 2 show the result of variance test ANOVA for age in the group EV $(F(11.25 \pm 0.61)=0.21, \mathrm{P}>0.05)$, this means there is no significant difference between the TC and MM, in the group $\operatorname{TC}(F(11.34 \pm 0.57)=0.21, \mathrm{P}>0.05)$, this means there is no significant difference between the EV and MM, the group MM $(F(11.19 \pm 0.61)=0.21$, $\mathrm{P}>0.05$ ), this means there is no significant difference between the EV and TC.

The result of variance test ANOVA for length in the group EV ( $F$ (152.84 $\pm 5.12$ ) $=0.39, \mathrm{P}>0.05$ ), this means no significant difference between the TC and MM , in the group TC $(F(151.30 \pm 7.33)=0.39, \mathrm{P}>0.05)$, this means there is no significant difference between the EV and MM , the group $\mathrm{MM}(F(150.61 \pm 6.88)=0.39, \mathrm{P}>0.05)$, this means there is no significant difference between the EV and TC.

The result of variance test ANOVA for mass in the group EV ( $F$ (43.46 $\pm 4.07$ ) $=2.20, \mathrm{P}>0.05$ ), this means there is no significant difference between the TC and MM, in the group $\mathrm{TC}(F(46.69 \pm 6.10)=2.20, \mathrm{P}>0.05)$, this means there is no significant difference between the EV and MM , the group $\mathrm{MM}(F(43.00 \pm 4.22)=2.20, \mathrm{P}>0.05)$, this means there is no significant difference between the EV and TC. The research interpreted that there is no significant differences between three groups in the variables of age, length, mass.

In table. 3 show the summary of the contrast analysis results among the three research groups in the physical and skills labels tests by the research sample in the pretest.

Table . 3 The summary of the contrast analysis results among the three research groups in the physical and skills labels tests by the research sample in the pre-test

| Variables | Groups | $\bar{x} \pm$ S.d | F | P |
| :---: | :---: | :---: | :---: | :---: |
| Abdominal Crunch | EV | $9.07 \pm 1.44$ | 0.36 | 0.69 |
|  | TC | $8.69 \pm 1.18$ |  |  |
|  | MM | $8.69 \pm 1.31$ |  |  |
| Push up | EV | $10.53 \pm 2.25$ | 1.74 | 0.18 |
|  | TC | $10.00 \pm 2.04$ |  |  |
|  | MM | $9.07 \pm 1.70$ |  |  |
| The explosive power of feet | EV | $159.46 \pm 13.08$ | 0.88 | 0.42 |
|  | TC | $160.61 \pm 14.78$ |  |  |
|  | MM | $154.00 \pm 12.73$ |  |  |
| Shooting | EV | $5.38 \pm 1.60$ | 0.33 | 0.71 |
|  | TC | $5.00 \pm 1.08$ |  |  |
|  | MM | $5.00 \pm 1.41$ |  |  |
| Passing | EV | $16.53 \pm 1.39$ | 0.10 | 0.90 |
|  | TC | $16.23 \pm 1.83$ |  |  |
|  | MM | $16.30 \pm 2.09$ |  |  |

Table 3 show the result of variance test ANOVA for abdominal crunch in the group $\mathrm{EV}(F(9.07 \pm 1.44)=0.36, \mathrm{P}>0.05)$, this means there is no significant difference between the TC and MM, in the group $\operatorname{TC}(F(8.69 \pm 1.18)=0.36, \mathrm{P}>0.05)$, this means there is no significant difference between the EV and MM , the group MM $(F(8.69 \pm 1.31)=0.36$, $\mathrm{P}>0.05$ ), this means there is no significant difference between the EV and TC.

The result of variance test ANOVA for push up in the group EV ( $F(10.53 \pm 2.25$ ) $=1.74, \mathrm{P}>0.05$ ), this means there is no significant difference between the TC and MM, in the group $\mathrm{TC}(F(10.00 \pm 2.04)=1.74, \mathrm{P}>0.05)$, this means there is no significant difference
between the EV and MM , the group $\mathrm{MM}(F(9.07 \pm 1.70)=1.74, \mathrm{P}>0.05)$, this means there is no significant difference between the EV and TC .

The result of variance test ANOVA for the explosive power of feet in the group EV $(F(159.46 \pm 13.08)=0.88, \mathrm{P}>0.05)$, this means there is no significant difference between the TC and MM, in the group TC $(F(160.61 \pm 14.78)=0.88, \mathrm{P}>0.05)$, this means there is no significant difference between the EV and MM, the group MM ( $F$ $(154.00 \pm 12.73)=0.88, \mathrm{P}>0.05)$, this means there is no significant difference between the EV and TC.

The result of variance test ANOVA for Shooting pre-test skill for the group EV $(F(5.38 \pm 1.60)=0.33, \mathrm{P}>0.05)$, this means there is no significant difference between the TC and MM , in the group $\mathrm{TC}(F(5.00 \pm 1.08)=0.33, \mathrm{P}>0.05)$, this means there is no significant difference between the EV and MM, the group MM $(F(5.00 \pm 1.41)=0.33$, $\mathrm{P}>0.05$ ), this means there is no significant difference between the EV and TC.

The result of variance test ANOVA for passing pre-test skill for the group EV $(F(16.53 \pm 1.39)=0.10, \mathrm{P}>0.05)$, this means there is no significant difference between the TC and MM, in the group $\operatorname{TC}(F(16.23 \pm 1.83)=0.10, \mathrm{P}>0.05)$, this means there is no significant difference between the EV and MM , the group $\mathrm{MM}(F(16.30 \pm 2.09)=0.10$, $\mathrm{P}>0.05$ ), this means there is no significant difference between the EV and TC.

The research interpreted that there is no significant differences between three groups in the physical and skills tests.

In table. 4 and5 show the pre-test and post-test of shooting and passing skills in basketball

In table .4 show the results of the pre-test and post-test of shooting skill in basketball.
Table . 4 The results of the pre-test and post-test of shooting skill in basketball

| Variables | Groups | Pre-test | Post-test | t | P |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  | $\bar{x} \pm$ S.d | $\bar{x} \pm$ S.d |  |  |
| Shooting | EV | $5.38 \pm 1.60$ | $8.61 \pm 1.32$ | 7.58 | 0.00* |
|  | TC | $5.00 \pm 1.08$ | $10.15 \pm 1.46$ | 11.09 | 0.00* |
|  | MM | $5.00 \pm 1.41$ | $12.46 \pm 2.14$ | 11.36 | 0.00* |

*P < 0.05

Table 4 shows the result that the mean score of the group EV in pre-test $5.38 \pm 1.60$ and post-test $8.61 \pm 1.32$, and $t$-test value $(\mathrm{t}=7.58, \mathrm{P}<0.05)$, this mean there is a significant difference between the pre and post-test for the shooting skill.

The result that the mean score of the group TC in pre-test $5.00 \pm 1.08$ and post-test $10.15 \pm 1.46$, and $t$-test value $(\mathrm{t}=11.09, \mathrm{P}<0.05)$, this mean there is a significant difference between the pre and post-test for the shooting skill.

The result that the mean score of the group MM in pre-test $5.00 \pm 1.41$ and post-test $12.46 \pm 2.14$, and t -test value $(\mathrm{t}=11.36, \mathrm{P}<0.05)$, this mean there is a significant difference between the pre and post-test for the shooting skill.

The research interpreted that there is a significant difference between three groups in the shooting skill because of the effect of educational programs, this result of consistent with the concept of hypothesis.

In table. 5 show the results of the pre-test and post-test of passing skill in basketball.
Table . 5 Indicates the results of pre and post-test of the passing skill in basketball.

| Variables | Groups | Pre-test | Post-test | t | p |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  | $\bar{x} \pm$ S.d | $\bar{x} \pm$ S.d |  |  |
| Passing | EV | $16.53 \pm 1.39$ | $30.23 \pm 3.21$ | 15.43 | 0.00* |
|  | TC | $16.23 \pm 1.83$ | $34.23 \pm 2.12$ | 23.43 | 0.00* |
|  | MM | $16.30 \pm 2.09$ | $36.23 \pm 1.83$ | 25.01 | 0.00* |

*P < 0.05

Table 5 shows the result that the mean score of the group EV in pre-test $16.23 \pm 1.39$ and post-test $30.23 \pm 3.21$, and t -test value ( $\mathrm{t}=15.43, \mathrm{P}<0.05$ ), this mean there is a significant difference between the pre and post-test for the shooting skill.

The result that the mean score of the group TC in pre-test $16.23 \pm 1.83$ and post-test $34.23 \pm 2.12$, and t -test value ( $\mathrm{t}=23.43, \mathrm{P}<0.05$ ), this mean there is a significant difference between the pre and post-test for the shooting skill.

The result that the mean score of the group MM in pre-test $16.30 \pm 2.09$ and posttest $36.23 \pm 1.83$, and t -test value ( $\mathrm{t}=25.01, \mathrm{P}<0.05$ ), this mean there is a significant difference between the pre and post-test for the shooting skill.

The research interpreted that there is a significant difference between three groups in the passing skill because of the effect of educational programs, this result of consistent with the concept of hypothesis.

In table. 5 show the results of the contrast analysis in the post-tests among the three research groups in variables of the Shooting and Passing skills

Table. 6 Indicates the results of the contrast analysis in the post-tests among the three research groups in variables of the Shooting and Passing skills.

| Variables | Groups | $\bar{x} \pm$ S.d | F | P |
| :---: | :---: | :---: | :---: | :---: |
| Shooting | EV | $8.61 \pm 1.32$ | 17.19 | 0.00* |
|  | TC | $10.15 \pm 1.46$ |  |  |
|  | MM | $12.46 \pm 2.14$ |  |  |
| Passing | EV | $30.23 \pm 3.21$ | 19.95 | 0.00* |
|  | TC | $34.23 \pm 2.12$ |  |  |
|  | MM | $36.23 \pm 1.83$ |  |  |

*P < 0.05

Table 6 show the results of variance test ANOVA for shooting post-test in the group $\mathrm{EV}(F(8.61 \pm 1.32)=17.19, \mathrm{P}<0.05)$, this means there is a significant difference between the TC and MM, in the group TC $(F(10.15 \pm 1.46)=17.19, \mathrm{P}<0.05)$, this means there is a significant difference between the EV and MM, the group MM ( $F(12.46 \pm 2.14$ ) $=17.19, \mathrm{P}<0.05$ ), this means there is a significant difference between the EV and TC.

The results of variance test ANOVA for passing post-test in the group EV $(F(30.23 \pm 3.21)=19.95, \mathrm{P}<0.05)$, this means there is a significant difference between the TC and MM, in the group $\operatorname{TC}(F(34.23 \pm 2.12)=19.95, \mathrm{P}<0.05)$, this means there is a significant difference between the EV and MM, the group MM $(F(36.23 \pm 1.83)=19.95$, $\mathrm{P}<0.05$ ), this means there is a significant difference between the EV and TC.

The research interpreted that there is a significant differences between three groups in the post-test skills.

In table. 7 and 8 show the results of the three method groups in the post-test of the shooting and passing skills in basketball

Through this table the researcher shows the reason of appearing this significant success in the effectiveness of the three educational programs of the research groups the educational video EV, the traditional coaching TC, the mixed method MM, for appearing a significant result among the three groups, the researcher will use a statistical method L.S.D in order to examine the possible differences among the average of the three research groups in shooting and passing tests, in term of which group surpassed the other one.

In table. 7 show the results of the indicates the difference of the Mean and the false rate in the test L.S.D of shooting skill in basketball

Table. 7 Indicates the difference of the Mean and the false rate in the test L.S.D of shooting skill in basketball

| Groups | Mean Difference | P |
| :---: | :---: | :---: |
| EV - TC | 1.53 | $0.02^{*}$ |
| $8.61-10.15$ | 3.84 | $0.00^{*}$ |
| $\mathrm{EV}-\mathrm{MM}$ |  | $0.00^{*}$ |
| $8.61-12.46$ | 2.30 |  |
| $\mathrm{TC}-\mathrm{MM}$ |  |  |
| $10.15-12.46$ |  |  |
| $* \mathrm{P}<0.05$ |  |  |

## *P < 0.05

Table 7 shows there is a significant difference between two groups EV and TC in the post-test and in favor of TC as the p value of ( $\mathrm{P}<0.05$ ), this mean that the TC education program is more effective of shooting skill in basketball.

There is a significant difference between two groups EV and MM in the post-test and in favor of MM as the p value of ( $\mathrm{P}<0.05$ ), this mean that the MM education program is more effective of shooting skill in basketball.

There is a significant difference between two groups TC and MM in the post-test and in favor of MM as the p value of ( $\mathrm{P}<0.05$ ), this mean that the MM education program is more effective of shooting skill in basketball.

The research interpreted that there is a significant difference in the post-test between three groups in the shooting skill because the effect of three different educational programs, this result of consistent with the concept of hypothesis.

In table. 8 show the results of the indicates the difference of the Mean and the false rate in the test (L.S.D) of handling skill in basketball.

Table .8: Indicates the difference of the Mean and the false rate in the test (L.S.D) of passing skill in basketball.

| Groups | Mean Difference | P |
| :---: | :---: | :---: |
| $\mathrm{EV}-\mathrm{TC}$ | 4.00 | $0.00^{*}$ |
| $30.23-34.23$ | 6.00 | $0.00^{*}$ |
| $\mathrm{EV}-\mathrm{MM}$ |  | $0.04^{*}$ |
| $30.23-36.23$ | 2.00 |  |
| $\mathrm{TC}-\mathrm{MM}$ |  |  |
| $34.23-36.23$ |  |  |

*P < 0.05

Table 8 shows there is a significant difference between two groups EV and TC in the post-test and in favor of TC as the p value of ( $\mathrm{P}<0.05$ ), this mean that the TC education program is more effective of passing skill in basketball.

There is a significant difference between two groups EV and MM in the post-test and in favor of MM as the p value of ( $\mathrm{P}<0.05$ ), this mean that the MM education program is more effective of passing skill in basketball.

There is a significant difference between two groups TC and MM in the post-test and in favor of MM as the p value of ( $\mathrm{P}<0.05$ ), this mean that the MM education program is more effective of passing skill in basketball.

The research interpreted that there is a significant difference in the post-test between three groups in the passing skills because the effect of three different educational programs, this result of consistent with the concept of hypothesis.

## The researcher interpretation

The researcher interpreted that there is a significant difference between the pre-test and post-test for the three groups EV, TC and MM of shooting skill in basketball according to t-test this result of consistent with the concept of hypothesis, that there is a significant difference between the pre-test and post-test for the three groups EV, TC and MM of passing skill in basketball according to t-test this result of consistent with the concept of hypothesis. Also the researcher interpreted that there is a significant difference between three groups EV, TC and MM in the post-test of shooting skill in basketball according to ANOVA, the result was in the post-test and in favor of MM as the p value of ( $\mathrm{P}<0.05$ ) according to test (L.S.D) this result of consistent with the concept of hypothesis, that there is a significant difference between three groups EV, TC and MM in the post-test of passing skill in basketball according to ANOVA, the result was in the post-test and in favor of MM as the p value of $(\mathrm{P}<0.05)$ according to test (L.S.D) this result of consistent with the concept of hypothesis.

## CHAPTER 5

## DISCUSSION

This study was aimed at investigating in prepare three educational programs are EV, TC and MM of the learning basic skill in basketball. The study was also disclosure of the differences between the pre-test and post-test of the three methods groups. It is also aimed disclosure of the differences between the three method groups EV, TC and MM in the post-test of the skill test.

### 5.1 Discussion of results by using Paired samples T-test

The result of the first hypothesis in this study is a significant difference in the means between pre-test and post-test for shooting and passing favor of post-test in basic skills test of three method groups EV, TC and MM in basketball game. According to the finding of the study revealed that there is a significant difference between the pre-test and post-test of three method groups in shooting skill, the difference result of $p$ value between pre-test and post- test of three groups is $\mathrm{P}<0.05$, the result was more in favor of the posttest, it also found that this result of consistent with the concept of hypothesis. Such as the study by Papastergiou and Gerodimo, This study involved 88 undergraduate students. A pretest/posttest research design was followed. Significant increases in students' basketball knowledge were found. However, the web-based multimedia course in combination with conventional face-to-face instruction was significantly more effective than conventional face-to-face instruction alone in increasing students' cognitive learning regarding the sport of basketball, at the same time being well-accepted by the students. These findings support the effectiveness of blended learning for PE at higher education level as well as the acceptance of this mode of learning by PE students (Papastergiou \& Gerodimos, 2013).

As showed the finding of the study revealed that there is a significant difference between the pre-test and post-test for three method groups in passing skill, the difference result of p value between pre-test and post- test of three groups is $\mathrm{P}<0.05$, the result was more in favor of the post- test, it also found that this result of consistent with the concept of hypothesis. Such as the study by Jaewon, in the studying aimed to identify the influence of the reactive video based on computer on the capability of teachers of the physical education in analyzing and performing the kinetic self-skills in tennis, they were randomly divided into two groups experimental group and control group, then the results indicated
that the use of the reactive video based on computer has a big effectiveness on the learning of teachers of the physical education and their capability in analyzing and performing the kinetic self-skills in tennis comparing to the traditional method (Jaewon, 1993). Also a study of Layne and Yli-Piipari that results revealed that students in the sport education group improved significantly in their offensive game performance and content knowledge compared to a traditional teaching model. These findings suggest that the sport education model is an effective pedagogical approach for improving game performance and sport content knowledge of university students (Layne \& Yli-Piipari, 2015).

### 5.2 Discussion result by using one way ANOVA select (L.S.D)

The result of the second hypothesis in this study is a significant difference in the means between three method groups EV, TC and MM in the post-test for basic skills test in basketball game. According to the finding of the study revealed that there is a significant difference between two groups EV and TC in the post-test and in favor of TC as the p value of $\mathrm{P}<0.05$, this mean that the TC education program is more effective of shooting skill in basketball, there is a significant difference between two groups EV and MM in the post-test and in favor of MM as the p value of $\mathrm{P}<0.05$, this mean that the MM education program is more effective of shooting skill in basketball, there is a significant difference between two groups TC and MM in the post-test and in favor of MM as the p value of $\mathrm{P}<0.05$, this mean that the MM education program is more effective of shooting skill in basketball, it also found that this result of consistent with the concept of hypothesis. Such as the study of Vernadakis, the results suggest that using multimedia technology as a teaching aid is as effective and as profitable at teaching skills as the traditional method, For statistics test used ANOVA, the found there are significant between pre-test and post-test for CAI group (Vernadakis, 2002).

As showed the finding of the study revealed that there is a significant difference between two groups EV and TC in the post-test and in favor of TC as the p value of $\mathrm{P}<$ 0.05 , this mean that the TC education program is more effective of passing skill in basketball, there is a significant difference between two groups EV and MM in the posttest and in favor of MM as the p value of $\mathrm{P}<0.05$, this mean that the MM education program is more effective of passing skill in basketball. there is a significant difference between two groups TC and MM in the post-test and in favor of MM as the p value of P < 0.05 , this mean that the MM education program is more effective of passing skill in
basketball, it also found that this result of consistent with the concept of hypothesis. Such as the study of Scott, in the studying aimed to compare between the static images and the dynamic ones in basketball, the researcher used the experimental method in gaining skill to two groups, the results showed that the professional performance level of the group of the dynamic images was better than that of the static images group, and that presenting various means of the dynamic images before training gives better results than the training before presenting the educational static means (Angorla Scott, 2005).

## CHAPTER 6

## CONCLUSION AND RECOMMENDATION

### 6.1 Conclusion

This study of comparison of traditional instruction educational videos and mixed methods for shooting and passing skills in basketball, the total number of all participants of the study was 39 boys, divided in to three method groups EV,TC and MM each group 13 boys in Sanhareeb sport club in Duhok/ Kurdistan region of Iraq. The researcher has used the experimental method, the data SPSS statistical methods have been used to analyze.

The results of this study showed as the table 4: the mean score of the group EV in pre-test $5.38+1.60$ and post-test $8.61+1.32$, and t -test value ( $\mathrm{t}=7.58, \mathrm{P}<0.05$ ), this mean there is a significant difference between the pre and post-test for the shooting skill. the mean score of the group TC in pre-test $5.00+1.08$ and post-test $10.15+1.46$, and $t$-test value ( $\mathrm{t}=11.09, \mathrm{P}<0.05$ ), this mean there is a significant difference between the pre and post-test for the shooting skill. the mean score of the group MM in pre-test 5.00+1.41 and post-test $12.46+2.14$, and t -test value ( $\mathrm{t}=11.36, \mathrm{P}<0.05$ ), this mean there is a significant difference between the pre and post-test for the shooting skill.

The results of this study showed as the table 5: the mean score of the group EV in pre-test $16.23+1.39$ and post-test $30.23+3.21$, and t -test value ( $\mathrm{t}=15.43, \mathrm{P}<0.05$ ), this mean there is a significant difference between the pre and post-test for the shooting skill. the mean score of the group TC in pre-test $16.23+1.83$ and post-test $34.23+2.12$, and $t$-test value ( $\mathrm{t}=23.43, \mathrm{P}<0.05$ ), this mean there is a significant difference between the pre and post-test for the shooting skill. the mean score of the group MM in pre-test 16.30+2.09 and post-test $36.23+1.83$, and t -test value ( $\mathrm{t}=25.01, \mathrm{P}<0.05$ ), this mean there is a significant difference between the pre and post-test for the shooting skill.

The results of this study showed as the table 6: the variance test ANOVA for shooting post-test in the group $\mathrm{EV}(\mathrm{F}(8.61+1.32)=17.19, \mathrm{P}<0.05)$, this means a significant difference between the TC and MM , in the group $\mathrm{TC}(\mathrm{F}(10.15+1.46)=17.19, \mathrm{P}<0.05)$, this means a significant difference between the EV and MM, the group MM (F $(12.46+2.14)=17.19, \mathrm{P}<0.05)$, this means a significant difference between the EV and TC.

The variance test ANOVA for passing post-test in the group EV $(\mathrm{F}(30.23+3.21)=19.95$, $\mathrm{P}<0.05$ ), this means a significant difference between the TC and MM, in the group TC ( F $(34.23+2.12)=19.95, \mathrm{P}<0.05)$, this means a significant difference between the EV and MM , the group $\mathrm{MM}(\mathrm{F}(36.23+1.83)=19.95, \mathrm{P}<0.05)$, this means a significant difference between the EV and TC

The results of this study showed as the table 7: the mean and the false rate in the test (L.S.D) of shooting skill in basketball, there is a significant difference between two groups EV and TC in the post-test and in favor of TC as the p value of ( $\mathrm{P}<0.05$ ), this mean that the TC education program is more effective of shooting skill in basketball. There is a significant difference between two groups EV and MM in the post-test and in favor of MM as the p value of ( $\mathrm{P}<0.05$ ), this mean that the MM education program is more effective of shooting skill in basketball. There is a significant difference between two groups TC and MM in the post-test and in favor of MM as the p value of ( $\mathrm{P}<0.05$ ), this mean that the MM education program is more effective of shooting skill in basketball.

The results of this study showed as the table 8: the mean and the false rate in the test (L.S.D) of passing skill in basketball, there is a significant difference between two groups EV and TC in the post-test and in favor of TC as the p value of ( $\mathrm{P}<0.05$ ), this mean that the TC education program is more effective of passing skill in basketball. There is a significant difference between two groups EV and MM in the post-test and in favor of MM as the p value of ( $\mathrm{P}<0.05$ ), this mean that the MM education program is more effective of passing skill in basketball. There is a significant difference between two groups TC and MM in the post-test and in favor of MM as the p value of ( $\mathrm{P}<0.05$ ), this mean that the MM education program is more effective of passing skill in basketball.

### 6.2 Recommendation

Further studies on vision in life necessary because of the limitations whether it was theoretically or empirically as mentioned above, will be needed of further studies on the removal of these limitations and offer our recommendations as follow.

This study focused on the Comparison of traditional instruction educational videos and mixed methods for shooting and passing skills in basketball, Recommended to procedure further study to the comparison of traditional instruction educational videos and mixed methods for shooting and passing skills at others games like volleyball.

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## Appendix (1)

Opinion polls form for the experts to determine the most important influential physical and kinetic characteristics and the appropriate tests

Greetings,
The researcher desires to conduct the specified research (comparing between the three groups, first educational video, second traditional coaching and mixed methods for the shooting and passing skills in basketball) on a sample of learners in Sanhareeb Sports Club in Duhok. And for what we've seen before in you from the experience and expertise in this area, you are requested to identify the most important physical and kinetic characteristics affecting the development of learning some kinetic skills in the game of basketball and the appropriate tests for it, for the purpose of conducting the process of parity between the groups of the research, serving the scientific research.

Respectfully,

Full name:

The scientific title:

Date of obtaining the scientific title:

Place of work:

Signature:

Masters student

Sizar Sulaiman Eshaq

The physical and kinetic characteristics and the appropriate tests

|  | Variables | Measuring unit | Selection |
| :---: | :---: | :---: | :---: |
| 1 | The explosive power of feet | Meter |  |
| 2 | Abdominal crunch | Repetition 10 seconds |  |
| 3 | Push up | Repetition <br> 10 seconds |  |
| 4 | Flexibility of the thighs and hips | CM |  |
| 5 | Agility\& quickness | 10 Meter seconds |  |
| 6 | Jump Rope | Repetition 10 seconds |  |
| 7 | Abdominal Crunch Strips | CM |  |

Note: Put mark in the table that you chose: $\mathbf{X}$

## Appendix (2)

Names of assistants work team

|  | Names | Certificate | Employer |
| :--- | :--- | :--- | :--- |
| 1 | Dr. Khalid Mohamed | Doctoral of Physical Education | Coach / Teacher in college |
| 2 | Sarkaft Rashed | Master of Physical Education | Coach / Teacher in college |
| 3 | Ashur Daived | Bachelor of Physical Education | Player / Teacher in school |
| 4 | Aleen Dawood Raban | Technical Institute of Physical Education | Coach / Teacher in school |
| 5 | Stans Hikmat polis | High school | Coach / Teacher in school |
| 7 | Rayan Dawood Raban | High school | Coach / Player in sport club |

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