

COMPARISON OF INJURIES BETWEEN MALE ANS FEMALE HANDBALL PLAYERS IN JUNIOR AND SENIOR TEAMS

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Abstract

Physical activity is important in human life at any age, but unfortunately, many injuries happen during times of practicing sports. Sports injuries account for about 16% of all recorded injuries in emergency departments in Sweden. Injuries are a major issue in most team sports; therefore, all sport teams work on having prevention of injuries. Handball is a tough sport with a lot of clash among the players that causes several injuries.

The purpose of this study is to compare injuries between male and female handball players in the senior and junior teams, to see how much age and gender may affect the injury incidence. This thesis has studied handball injuries by choosing and examining random patterns from Swedish handball teams in various levels of senior and junior teams of both sexes. The Survey has been done in spring 2012, and I have personally designed the questionnaire. The study comprised of 226 players, including 128 seniors (53 women and 75 men) and 98 juniors (47 women and 51 men).

The total number of the injured players was (145), and according to their responses of the survey, the total number of injuries was (220), meaning that 64% of the players were injured at least once during the season 2011-2012. Handball injuries are divided into two types: acute injuries and overloading injuries, and they can fall during training and matches.

Finally, I conclude that there are no significant differences detected between the different groups of age and gender concerning injuries, locations of injuries, types of injuries (acute or overload), times of injury (trainings or matches) and periods of absence from trainings and matches, in Swedish teams of handball. However, the distribution of males are statistically different, p <0.05. That there are fewer injuries among seniors than juniors leading to absence 8-30 days from the times of matches and training, and more injuries among seniors leading to the absence>30days. Therefore, I which proves no differences between genders and ages in injuries.

KEYWORDS: HANDBALL. INURY .PLAYER. SWEDISH. ABENTEEISM.



1. INTRODUCTION

Sports injuries are a major issue for athletes, coaches and sports clubs. Therefore, the International Olympic Committee has established a research center for the prevention of injuries in different sports. [26] Sports injuries are defined by Johnson as "all types of injuries incurred in connection with sporting activities". [24] The term injuries fall into three subgroups. These are short-term injury (1-7 days absence), medium damage (1 week to 1 month of absence) and long-term damage (more than one month's absence). It is a well-known fact that any kind of sport, physical activity or active lifestyle entails a certain risk of injury. [14].

Regardless of activity level as constituting damage a major problem for the athlete and can result in a

Increased risk of future problems that result in inactivity [28]. The number of registered emergency department in Sweden in 2009 was 688 300. Searched Of these 110,400 emergency treatment of sports injury. Sports injuries account for about 16% of all registered acute injury [41]. Therefore, prevention a priority in every team. [16]

Handball is one of the team sports that have a high intensity with frequent and harsh physical contacts between the players. Handball has been an Olympic sport since 1972, and is one of the most popular sports in Europe after football. The number of affiliates of the International Handball Federation (IHF) is 167, which represents approximately 800,000 teams. [23] Handball is unfortunately a lot of damage afflicted sports. Among female handball player takes about 40 injuries per 1000 match hours. Over 90% of the injuries were traumatic and the biggest problem was the anterior cruciate ligament injuries. Among the male handball players, the incidence is lower, at around 14 injuries per 1000 match hours [46]. In a retrospective study in young female players (14-16 years) reported an incidence of 52 injuries per 1000 match hours. [47]

From literature review, it can be concluded that information about and study of injuries in handball is very limited. However, showed a comparative study of injuries in eight team sports during the 2004 Olympic Games in Athens that the incidence of injuries was highest in baseball and football. [25] Handball is one of the sports team that registered high rates of injuries, up to 15% of the athletes during the 2008 Summer Olympics. [3] In this context occurs most damage (84%) due to contact with another player [36].

The purpose of this study is to compare injuries between male and female handball players in the junior and senior teams, to see how age and gender may affect the injury picture.

Sending out a survey will be done where handball player (man and woman) in different teams in Sweden will fill in if they have been damaged during the 2011-2012 season. The survey is aimed at both junior players and senior players in Sweden. The results of the study will provide a picture of the injury incidence, injury location, type of injury (acute / overload), time during the season (practice / game) and absenteeism.

This study has the following hypotheses: Female players have a higher injury incidence than male players. Senior players have a higher injury incidence than junior players. Most injuries occur during the match, regardless of gender and age.

2. SELECTION

Through a stratified sample, contact was made with 401 of the 11 549 handball players of both sexes (6231 men and 5318 women) in the Swedish handball teams at various levels of senior and junior teams. [35] Criteria for participation in the study was that the player in 2011 playing in a handball, and that they must be 16 years or older. Eighteen years old is the boundary between youth players and senior players. In addition, the questionnaire filled out correctly. Then compared injuries in the different groups, but 168 of the 401 were excluded, however, because



no reply is received within the deadline. Of the 233 players who participated met seven players not meet the criteria required to participate in the survey.

3. RESULTS

Total number of respondents was 226 players, including 128 seniors (53 women and 75 men) and 98 juniors (47 women and 51 men). According to the survey responses, I have chosen to present and headlining the performance against the issues. The results will be reported by descriptive figures and then with adequate statistical calculation.

1. INJURY INCIDENCE.

More than half of the 226 players (145), i.e. 64% in different age and of both sexes were injured, and the total number of injuries was 220 during the 2011-2012 season.

Below in Table 1 shows the results for gender (men and women) to question 4; Were you injured at some point during the 2011-2012 season? Distribution of men and women show no difference in injury incidence (ChiSq = 0.74 and P < 0.05).

Number of injuries per group	Male	Female	Total
Injured players	36% (82)	28% (63)	64% (145)
Total injuries	59% (130)	41% (90)	100% (220)
Non-injured	19% (44)	16% (37)	35% (81)

Table 1. Table shows the results for gender (men and women).

From Table 2 shows the distribution of age (senior and junior) to question 4; Were you injured at some point during the 2011-2012 season? There is no significant relationship between seniors and juniors in the injury incidence (ChiSq = 0.55 and P < 0.05).

Table 2 shows the results for age group (senior and junior).

Number of injuries per group	Junior	Senior	Total
players injured	35% (80)	29% (65)	64% (145)
Total injuries	55% (122)	45% (98)	100% (220)
Non-injured	21% (48)	15% (33)	36% (81)

2. INJURY LOCATION

The body is divided into three major areas in order to clarify the statistics regarding injury location (arm, leg and body).

Below in Table 3 show injury location results for gender (men and women) under question 7, 11 and 15; in which part of the body were you hurt? T



Distribution of men and women show no difference in injury location. The results of the responses to question 7 on the basis of the survey show that the distribution of injury location is not significantly different between men and women (ChiSq = 0.24 and P <0.05). The answers to question 11 show that the distribution of injury location is not significantly different between men and women (ChiSq = 0.24 and P <0.05). The answers to question 11 show that the distribution of injury location is not significantly different between men and women (ChiSq = 0.57 and P <0.05). The answers to question 15 shows that the distribution of injury location is not significantly different between men and women (ChiSq = 0.66 and P <0.05).

injury location	Male	Female	Total
arm	23% (50)	11% (24)	34% (74)
bone	29% (64)	23% (50)	52% (114)
body	7% (16)	7% (16)	14% (32)
null	54% (44)	46% (37)	(81)

Table 3 shows the injury location and total number of injuries by gender (men and women).

From Table 4, the injury location results for age (senior and junior) under question 7, 11 and 15; In which part of the body were you hurt?

There is no significant relationship between seniors and juniors in injury location. The results of the responses to question 7 on the basis of the survey show that the distribution of injury location is not significantly different between seniors and juniors (ChiSq = 0:14 and P <0.05). The answers to question 11 show that the distribution of injury location is not significantly different between seniors and juniors (ChiSq = 0:48 and P <0.05). The answers to question 15 shows that the distribution of injury location is not significantly different between seniors and juniors (ChiSq = 0:48 and P <0.05). The answers to question 15 shows that the distribution of injury location is not significantly different between seniors and juniors (ChiSq = 0.85 and P <0.05).

Table4, shows the injury	location and total number	of injuries per age group	(senior and	junior)
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injury location	Senior	Junior	Total
arm	19% (42)	15% (32)	34% (74)
bone	31% (67)	21% (47)	52% (114)
body	6% (13)	9% (19)	15% (32)
null	59% (48)	41% (33)	(81)

3. TYPE OF INJURY

Below in Table 5 shows the defect type result for gender (men and women) under question 8, 12 and 16; about the defect type.



Distribution of men and women show no difference in the type of injury. The results of the types of answers to question 8 on the basis of the survey show that the distribution of type of injury is not significantly different between men and women (ChiSq = 0:54 and P <0.05). The answers to question 12 shows that the distribution of type of injury is not significantly different between men and women (ChiSq = 0:23 and P <0.05). The answers to question 16 show that the distribution of type of injury is not significantly different between (ChiSq = 0:51 and P <0.05).

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Table 5, shows the up	SUIDUUUII OI IIIJUIIES	according to type or injury	y by genuel (men and women).
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Type of injury	Male	Female	Total
Acute	36% (79)	24% (53)	60% (132)
Overload	23% (51)	17% (37)	40% (88)

From Table 6 shows the type of injury the result of age (senior and junior) under question 8, 12 and 16; about the type of injury.

There is no significant relationship between seniors and juniors in the type of injury. The results of the eight types of answers to questions based on the survey shows that the distribution of type of injury is not significant between the seniors and juniors (ChiSq = 0:38 and P <0.05). The answers to question 12 shows that the distribution of type of injury is not significant between the seniors and juniors (ChiSq = 0.66 and P <0.05). The answers to question 16 shows that the distribution of type of injury is not significant between the seniors and juniors (ChiSq = 0.53 and P <0.05).

Table 6 shows the distribution of injuries according to type of injury per årsgrupp (senior and junior).

The type of injury	Senior	Junior	Total
Acute	31% (69)	29% (63)	60% (132)
Overload	24% (53)	16% (35)	40% (88)

4. ABSENTEEISM

Distribution of men and women show no difference in absenteeism. The results of the responses to question 9 on the basis of the survey show that the distribution of absenteeism is not significantly different between males and women (ChiSq = 0.70 and P <0.05). The answers to question 13 show that the distribution of absenteeism is not significantly different between males and females (ChiSq = 0.32 and P <0.05). The answers to question 17 show that the distribution of absenteeism is not significantly different between males and females (ChiSq = 0.32 and P <0.05). The answers to question 17 show that the distribution of absenteeism is not significantly different between males and females (ChiSq = 0.26 and P <0.05).

Table 7 the table shows absenteeism by gender (males and females).

Absenteeism	Males	Females	Total
1-7 days	31% (68)	19% (42)	110 (50%)



8-30 days	15% (34)	14% (30)	64 (29%)
Mer än 30 days	13% (28)	8% (18)	46 (21%)

Table 8 shows the result of absence of age (senior and junior) under question 9, 13 and 17; absenteeism (maximum participation) competition and training.

There is no significant difference between seniors and juniors in absenteeism according to the results of the responses to question 9 on the basis of the survey show that the distribution of absenteeism is not significant between the seniors and juniors (ChiSq = 0:14 and P <0.05). The answers to question 13 show that the distribution of absenteeism is not significant between the seniors and juniors (ChiSq = 0:14 and P <0.05). The answers to question 13 show that the distribution of absenteeism is not significant between the seniors and juniors (ChiSq = 0:49 and p <0.05), but the answers to question 17 showed that the absence of men, the distribution is statistically different, (ChiSq = 0.04 P <0.05). That is to say that fewer injuries occur among seniors than juniors, leading to an absence of 8-30 days. Many injuries occur among seniors than juniors, leading to an absence of more than 30 days.

Absenteeism	Senior	Junior	Total
1-7 days	29% (64)	21% (46)	110 (50%)
8-30 days	12% (27)	17% (37)	64 (29%)
More than 30 days	14% (31)	7% (15)	46 (21%)

Table 8: The table shows absenteeism per years group (senior and junior).

5. TIME DURING THE SEASON

Below in Table 9 shows the results for time sex (males and females) according to question 10, 14 and 18; injury occurred during training or match?

Distribution of men and women show no difference in time. The results of the answers to question 10 on the basis of the survey show that the distribution of time is not significantly different between males and females (ChiSq = 0.26 and P < 0.05). The answers to question 14 show that the distribution of time is not significantly different between males and women (ChiSq = 0.88 and P < 0.05). The answers to question 18 shows that the distribution of time is not significantly different between males and p < 0.05). The answers to question 16 shows that the distribution of time is not significantly different between males and p < 0.05). The answers to question 18 shows that the distribution of time is not significantly different between males and females (ChiSq = 0.75 and P < 0.05).

Table 9: The table shows the injury distribution by gender (males and females) during matches and training sessions in the season.

Time	Males	Females	Total
Match	26% (57)	24% (53)	110 (50%)
Training	33% (73)	17% (37)	110 (50%)

Table 10 shows the timing results for age (seniors and juniors) under question 10, 14 and 18; injury occurred during training or match?



There is no significant difference in injury distribution between seniors and juniors in terms of timing of when the injury occurred. The results of the answers to question 10 on the basis of the survey show that the distribution of time is not significantly different between seniors and juniors (ChiSq = 0:22 and p <0.05). Svaren to question 14 show that the distribution of time is not significantly different between seniors and juniors (ChiSq = 0.91 and P <0.05). The answers to question 18 shows that the distribution of time is not significantly different between seniors and juniors (ChiSq = 0.83 and P <0.05).

Table 10 the table shows the injury distribution by year group (senior and junior) during matches and training sessions in the season.

Time	Senior	Junior	Total
Match	29% (64)	21% (46)	110 (50%)
Training	26% (58)	24% (52)	110 (50%)

4. DISCUSSION

Injuries in handball is an area that is limited, therefore I believe that more research needs to be conducted. In the field of sports medicine, it is well known that handball has a high incidence of injuries and that these injuries are often difficult as has been shown by many researchers [5,11,31,33,44].

Based on my literature review, it seems that criteria related to injuries in handball player is not clearly defined [9,13,23]. The frequency of injuries in handball has been investigated in several studies and will vary depending on how you define harm and the group studied [4,17,18,20].

According to the results in Tables 1 and 2 show that 64% of the players of both sexes and of all ages have been injured at least once during the 2011-2012 season. This is consistent with Hoeberigs et al. [22] examined in their study involving surveys of 300 players (random) of the Dutch Handball Federation, that the damage is included in handball and compared the injured to non-injured players in terms of gender, age, somatotype and sports participation. Nearly 51% of all handball players get at least one injury during a year.

An interpretation I see that there are varying injury incidence between different ages and sexes. Because handball is one of the many sports that has contains tough physical game between players, as well as the physical requirements such as high jumps and hard landings on legs in different conditions and unsafe too sudden and fast movements and game rules to allow contact with an opponent, but also to a handball players use fast movements that vary in all parts of the body and the cause of most damage referred to in previous studies [2,12,31,44].

From my findings, there are no significant differences in the incidence of injury, whether between males and women or between junior and senior players. This is consistent with a study by [3]. In a previous study, which describes the percentage of damage (%) and the associated direct medical and indirect costs of sports injuries in Flanders, took 72 of 82 Flemish sports federations. The study showed that the frequency among male and female handball players was similar [14]. Another study found that injury rates in junior handball is as high as in the senior teams of both sexes [37]. A special feature of handball is the high frequency of injuries among senior and junior players [43,48].

The survey shows those parts of the body affected by injuries, and these are the head, neck, shoulder / shoulder, stomach, chest, back, arm, elbow, wrist, hand, fingers, hip / groin, thigh, knee, lower leg, ankle and foot. The body is divided into three sections (arms, legs and body) to injury location, with a view to illustrate the distribution of injuries.



According to the results in Tables 3 and 4 there is no significant difference in injury location between males and women or junior and senior players. Other studies have shown most damage in the lower limbs [2, 7, 10, 12, 25, 28]. Injuries to the lower extremities occur more frequently due to the dynamic, fast, and unexpected movements and jumps [6,8]. The cause of most injuries were in contact with an opponent. These results demonstrated the same as Langevoort [29], and Schulz et al. [39].

This is consistent with the perception of Oehlert et al. [36] the purpose of the study was to investigate the injury situations in European handball with a video method. They argue that handball is a högintensitetssport with frequent physical contact between players, where the arms and legs and chest and back are all vulnerable to injury regardless of gender and age.

An interpretation of why my results showed the opposite must take into account the relatively small number of players who participated in the study.

Tables 5 and 6 show the results for different types of injuries by gender (males and females) and year group (senior and junior). Distribution shows no difference in the type of injury (acute and overload). My result is found to be consistent with a study investigating the etiology, mechanism and anatomical localizations of injuries observed among male and female players during the tenth edition of the East and Central African Championships for Clubs (April 9 to 17, 1995) in Nairobi, Kenya. There were nine teams for males and females for five teams from Kenya, Uganda, Tanzania and Ethiopia, who played nineteen and ten matches which resulted in 52 (78%) and 15 (22%) injuries. It was found that the failure mechanism was the same for both male and female players. [1] Hagglund et al. [20] found that there was no significant difference between acute injuries and overload damage. The same results were reported also in a previous study that examined injury incidence and types of injuries among male and female players using two different prospective registration methods. The main results indicate that the types of injuries in both sexes among junior and senior players in handball are equal [37].

Tables 7 and 8 show the results for the period of absence for gender (males and females) and year grupp (senior and junior). The distribution shows no significant difference between both groups of absence. My results showed, however, not consistent with previous research, that is to say that the players at the highest level of play had largest share of players with long absence. The same is also reported in a study of Hatzimanouil et al. [21] that aimed to determine the prevalence and severity of injury in the Greek handball team and to correlate the endogenous factors and the type of exercise. The study sample consisted of 216 male handball players. Data on the personal characteristics of Greek handball play clean used in the statistics show that the majority of those were young or adults, with a lot of previous sports experiences. The results showed a high incidence and severity of injuries (42%) and (64%) of young people and adults, and also showed that the higher the player's level, the greater number of injuries.

Among males, the distribution is statistically different in terms of absence from matches and training sessions. There were fewer injuries among seniors than juniors leading to an absence 8-30 days, and several injuries among seniors leading to an absence of more than 30 days. This is therefore a contradiction compared to Hatzimanouils study. Based on my study, I cannot connect game levels to the occurrence of serious injury.

I chose to do a retrospective study. The advantage of a retrospective study design is that data from a relatively long time period can be collected in a relatively short time. The time gain was the biggest reason why a retrospective method was chosen over a prospective in this study. The disadvantage of a retrospective study is the uncertainty that one will remember what injuries they had and how long you be away for their injuries.

A difficult but nonetheless interesting discussion, the surrounding factors, which in one way or another may have affected the players' way to report the damage. I therefore question how well the actual result reflects reality?



There is in fact, some factors that may have affected the players at the time the questionnaires were filled in. Example, stress, lack of interest, misinterpretations, failing memory of the previous season and unwillingness to question testleads if any uncertainty on the survey content be such factors.

In Tables 9 and 10 shows the distribution of injuries during the match or during training. There is no big difference in the timing of the injuries between the sexes (males 50% and females50%) and year grupp (senior and junior 50%). during the 2011-2012 season. My results showed, however, not consistent with previous research that has shown that injuries during matches are more common than in the trainings according Myclebust et al. [34] The purpose of their study was to examine gender differences in the incidence of ACL injuries among prominent handball player. They also wanted to investigate injury mechanisms and possible risk factors for ACL injury. The study was done prospectively during the seasons 1993-94, 1994-95 and 1995-96. This study became the main findings that the incidence of injury was 30-fold higher among women than among males during matches. The second study was done to evaluate the damage in handball with total 186 male players from 16 teams. It was found that the injuries during trainings were fewer than injuries during matches. [40]

One explanation for this may be that during the game, players try to reach a level of high performance that is much more intense than during exercise, increasing the risk of injury. Meanwhile, I see that the number of training hours is much greater than the number of game hours, and this also increases the risk of injury during exercise. The high performance requirements and long workouts, I think is the reason for no significant differences in time (training, match) exhibited during the season. My assessment is supported by Myklebust et al [34] who argue that the risk of injury during exercise is the same as the game. The injuries were evenly distributed between 54% training and competitions 46% p = 0.18). [30]

The players were, after all, courteous, and I also felt that they were in favor of completing the survey. Only in a few cases, players chose to forego participation. A proposal for future surveys is to allow all participants to answer under such similar circumstances as possible, preferably well before a workout, or at any separate occasion whether it is possible to solve practically. This may at least be a measure to minimize the number of sources of error in the survey. A prospective study would obviously be the best way to study these parameters.

5. CONCLUSIONS

There were no significant differences regarding the injury incidence, injury location, type of injury (acute / overload), and time of occurrence during the season (training / match) between male and female junior and senior players in this selection of Swedish handball player during the 2011-2012 season. There were no significant differences in absenteeism between female junior and senior players in the Swedish handball during the 2011-2012 season.

Among men, there was less injuries with 8-30 days absence, but several injuries and more than 30 days absence, were among seniors over juniors P <0:05.

It would be interesting to conduct the same survey with several players, but any time a prospective study with a large number of participants.

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APPENDICES

Appendix 1

Information Form for participants

Dear participants!

You will now have the opportunity to become involved in a survey of the subject "Comparison of injuries in junior and senior handball players between male and female." The questionnaire is a part of my Degree (A level).

The purpose of this study is to investigate whether there are differences in injuries between male and female, and between junior and senior players. I will also examine the factors that contribute to differences in injury (if it exists) in different groups. The questionnaire consists of 19 questions and related responses. I hope that the results can help to prevent injuries specifically for handball players.

Participation is voluntary but your responses are important to get reliable and useful results. Your answers will be kept confidential and only poll managers and supervisors who take some of the answers. The results of the thesis are presented in the form of statistics where no individual answers can be deduced. Obviously, I can send you a copy of my essay if you want to read it when it's ready.

Informed consent

- 1. I have read the written information
- 2. I have had the opportunity to ask questions
- 3. I consent to participate in the study

The participant's signature..... Date..... Location.....

> Project manager: Faleh Ali Salman Phone: 0736327465 E-mail: dr.alifaleh@gcss.se Sports Medicine Unit Umeå University



Appendix 2

ATTENTION! The questions refer to the season 2011 to 2012.

Name: ______ the name will not appear in the paper.

Age: ___

Position: ______ (When changing the position, specify where you played most often)

Gender: Male? Female?

- 1. years group play handball? Youth team 2 Senior teams2
- Estimate the number of matches you were complicit in the season 2011 to 2012: approx 10% approx 25% approx 25% approx 2100% 2
- 3. Estimate the number of workouts you were involved in:

approx 10% approx 2 25% approx 2 50% approx 2 75% approx 2 100% 2

- 4. Were you injured at some point during the season 2011 to 2012? Yes? No?
- 5. Number of training hours per week:
- 6. Number of matches season 2011 to 2012 (including training match):

If <u>yes</u> to question 4, continue with the next question. When <u>No</u>, submit the questionnaire.

Below you questions that have been damaged, one or more times. Answer so far as to agree with you. If you had one, two or three injuries.

First injury

- 7. In which body part you were injured? head / neck 2 Axle / shoulder 2 Stomach / chest 2 back 2 arm 2 elbow 2 wrist / hand / fingers 2 Hip / groin 2 thigh 2 Knee 2 leg 2 Ankle / foot 2
- 8. Type of injury: Acute, sudden injury with clear orsak² Overload, damage has an insidious nature and arises during the time ²
- 9. absenteeism (maximum participation) match and training:
- 1- 7dagar² 8-30 dagar² more than 30 dagar²
- 10. Did the injury occur during training or match?
- Training[®] Match[®]

If you only had an injury last season, you are hereby completed the questionnaire.

Otherwise, please proceed.

Second injury

11. In which body part were you hurt?

Head / neck 2 Axle / shoulder 2 stomach / chest 2 2 Back Arm 2 2 Elbow Wrist / hand / fingers 2 Hip / Groin 2 2 Thigh Knee 2 2 Lower Leg Ankle / foot 2

12. Type of injury:

Acute, sudden injury with clear cause 🛛

Overload, damage has an insidious nature and arises during the time 🛛



- 13. Absence from (maximum participation) match and training:
 - 1 -7days 🛛 8-30 days 🖉 more than 30 days 🖓
- 14. Did the injury occur during training or match?

Training 🛛 Match 🖓

Third injury

- 15. In which body part you were injured? head / neck 2 Axle / shoulder 2 Stomach / chest 2 back 2 arm 2 elbow 2 wrist / hand / fingers 2 Hip / groin 2 thigh 2 Knee 2 leg 2 Ankle / foot 2
- 16. Type of injury: Acute, sudden injury with clear orsak² Overload, damage has an insidious nature and arises during the time ²
- 17. absenteeism (maximum participation) match and training:
- 1- 7dagar[®] 8-30 dagar[®] more than 30 dagar[®]
- 18. Did the injury occur during training or match?
- Training[®] Match[®]
- 19. If you had 3 injuries, you are hereby completed the questionnaire. Otherwise, describe other damage incurred by you, how many times and in what part of the body damage has occurred.

Thank you answered this questionnaire, and good luck during the season 2011- 2012!

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RELATIONSHIP OF EMOTIONAL INTELLIGENCE AND ATH-LETIC PSYCHOLOGICAL ADJUSTMENT IN THE ACCURACY OF SOME BASIC SKILLS IN VOLLEYBALL

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Abstract

The researcher Felt to study the compatibility and intelligence and their relationship with basic skills in volleyball to see which of the two Psychological qualities is more contribution accurately (scroll from the top, scroll down, the transmission), for working of professionals (teachers of this article) to focus on which of the two qualities is more important at the stage of education, and the Researcher used descriptive approach in addition to modifying the scales in accordance with the requirements of the study and using the tests of the three skills, and used the percentage, arithmetic mean, standard deviation , median, coefficient of sprains, simple correlation coefficient (Pearson), to extract the results, and concluded that the best level of basic skills was for sending then scrolling from the top and finally scroll from the bottom, and that the level of the sample in the three basic skills of is the average, in addition to the level of athletic psychological adjustment was greater than the level of athletic emotional intelligence for the research sample, and recommended to work to develop the level of educational programs in different ways and styles, for better evaluation.

KEYWORD: ATHLETIC. INTELLIGENCE. PSYCHOLOGICAL. VOLLEYBALL. SKILLS.

1. INTRODUCTION

The importance of the study due to the foregoing , the emotional intelligence and athletic psychological adjustment play an important role for the success of the educational life that belong to sports academies and also by focusing on them as well as some basic skills in volleyball, which is like a tool chosen by the researcher for the level of physical scale and motor ability, as well as to the foregoing is to show the role of these two psychological qualities who did not receive their share of sufficient studies, since physical education is competence cannot be hashed from the educational process, the researcher put this study, considering that the importance is a reality of the case because of the previous studies in way that help professionals to determine the level of gaining the large ability in the development of their skills to increase the stability and equilibrium in their development through the level of athletic emotional intelligence, and athletic physical and psychological adjustment, whichever is greater contribution accurately (scroll from the top, scroll down, the transmission), so for the professionals work (teachers of this article) to focus on which of the two qualities is more importance at the stage of education, which will later develop these skills, and as a result will serve the educational process, as well, also to know which of the two qualities developed among students through lectures and tutorials, and that the goals of research were; knowing the relationship of emotional intelligence, athletic and psychological adjustment with the accuracy of skill (scroll from tope, scroll from down, the transmission) for the second stage students Faculty of physical Education, University of Diyala.



2. RESEARCH METHODOLOGY

Curriculum "is the way in which the researcher used in the study of the problem to find out the truth (Ahmed Bedier 1978). The researcher used the descriptive manner by relations relational style as it is suitable with the research problem.

3. RESEARCH SAMPLE

The researcher resorted to collect his data and information from the original community or from a representative sample of the community" (fakher akil 1979). Included on the second stage of the students (Physical education College / University of Diyala) (2013/2014 m) males and consisting of (7) divisions, numbered (175) student, has been adapted to the scale on (70) representing (40%) of society overall, while the ultimate measure applied to (40) students, and representing (22%) of the original community, and so the conditioning sample and the ultimate measure sample which is (110 students) with (63%) of the original community, which is the same percentage pertaining to the research sample for the full tests of skill and scale.

4. TESTS USED IN THE RESEARCH

- 1. Adaptation of the measurement of athletic emotional intelligence (Mustafa Rashad 2010) and (Haider Yacoubi, 2011).
- 2. It Is a special form of measuring a trait of emotional intelligence in the field of sports, and this measure consists of (20) twenty Phrases, a player will answer them through a scale of five points which indicate the athletic emotional intelligence, degrees of scale range between (20-100) degree and high degree on the scale indicates the excellence of the student with high degree of athletic emotional intelligence while low-grade indicates the weakness of emotional intelligence of the athletic student.

Adaptation measure of athletic psychological adjustment:

scale of motivation features, which put (Abdul Razzaq waheeb 2006) aims to identify some selected attributes, which are linked to athletic performance which is characterized by the high level, which consists of (20) phrases and the player answers the scale phrases and in accordance with tri-gradient scale (always - sometimes – often).

- 3. Test of accuracy of performance of pass from the top in volleyball on the wall (Mohammed Hassanein, 1988).
- 4. test of the accuracy of performance of transmission from the bottom in volleyball on the wall (Mohammed Hassanein, 1988)
- 5. Test of the accuracy of the transmission from the top in volleyball: (Maitham Ibrahim, 2004).

5. THE MAIN EXPERIMENT

the researcher did the experiment on (40) students to test each division in two lectures and according to the table (in addition, distribution forms of scales), corresponding to the days (Sunday – Tuesday - Thursday), the experiment implemented on Sunday (03/02/2014) m, and ended on Thursday-(06/03/2014) m.

6. STATISTICAL METHODS

The researcher used the statistical bag (SPSS) to extract the research results as follows:

7. DISPLAYING, ANALYZING AND DISCUSSING THE RESULTS



Displaying the results of athletic psychological adjustment and athletic emotional intelligence and some basic skills in volleyball (scroll from the top, scroll down, the transmission) and analyzing it:

Table (1) The arithmetic mean, median, standard deviation and coefficient of twisting of the athletic psychological adjustment.

rank	variables	The greet degree	The arith- metic mean	The median	The stand- ard devia- tion	coefficient of twisting
1	The athletic Psychological adjustment	60 d	46.55	45.50	4.92	-0.13
2	The athletic Emotional Intelligence	100 d	64.75	66.00	6.70	-0.37
3	Scrolling from the top	15 d	9.57	10.00	2.57	-0.29
4	Scrolling from the bottom	15 d	8.86	9.00	2.58	0.21-
5	Transmission from the top	15 d	11.34	11.00	2.22	-0.21

Discussion the results of athletic psychological adjustment and some basic skills in volleyball (scroll from the top, scroll down, the transmission)

Table (2): The coefficient of correlation and the percentage of a line of the athletic psychological adjustment and some basic skills in volleyball (scroll from the top, scroll down, the transmission.

The Statistical pro-	Variables	Scrolling	Scrolling	Transmission from the
cessors		From the top	From the bot-	top
			tom	
The correlation co-		.149	*.28	*.31
efficient	Athletic Psycho-			
Percentage of error	logical Compati-	.168	.048	.044
	bility			

Table (2) shows: That there is a direct correlation between athletic psychological adjustment and skills of scrolling from the down and transmission, and shows that increasing the degree of accuracy of performance is an indicator of the improvement in the level of athletic psychological adjustment, or (athletic psychological adjustment leads to improvement of accuracy of performance).

The researcher finds the reason for this is that the scrolling skill from the bottom needs responses which puts the student in need of high psychological adjustment in order to deliver the ball to the prepared which comes always in different directions and speeds; the student needs to adapt with them, in addition the skill of the scrolling from the bottom in its requirements needs a physical compatibility before the psychological at level higher than scrolling from the top.

while the skill of the transmission, the need for athletic psychological adjustment requirements comes through knowledge of the student about the situation of the opponent and trying to put the ball into right areas in addition to the psychological impact if he did not have an athletic psychological compatibility through distance and requirement of the required force for crossing the ball so well that the transmission is less skill used by the student during the lesson unit because of the requirements of the game for the used skills, and therefore needs high athletic psychological compatibility for the success of crossing the ball and get the direct point or confusing the opponent, but



the emergence of these relationships is due to the physical exercises give a positive feedback for case and reciprocal relationship between the athletic physical and psychological adjustment and the skills.

So the impact of exercises and games leads to the development of athletic psychological and physical adjustment (Salima Abdullah 2002).

DISCUSSION THE RESULTS OF ATHLETIC EMOTIONAL INTELLIGENCE AND SOME BASIC SKILLS IN VOLLEYBALL (SCROLL FROM THE TOP, SCROLL DOWN, THE TRANSMISSION)

Table (3)The correlation coefficient and the percentage of error of athletic emotional intelligence and some basic skills in volleyball (scroll from the top, scroll down, the transmission)

The Statistical pro-	Variables	Scrolling	Scrolling	Transmission from the
cessors		From the top	From the bot-	top
			tom	
The correlation co-		*.29	.054	.006
efficient	Athletic Psycho-			
Percentage of error	logical Compati-	.047	.363	.485
	bility			

Table (3) shows : there is a direct correlation between athletic emotional intelligence and skill of scrolling from the top, and indicates that increasing the degree of accuracy of performance skill is an indicator of the improvement in the level of athletic emotional intelligence or vice versa, or improvement of the athletic emotional intelligence leads to improvement of accuracy of performance.

The researcher believes that intelligence in terms of being of general ability which shows the public mental level of the person is an important condition for success in most sporting activities, especially those activities that require speed of perceiving the relations in various positions of playing that needs to speed as is the case of sports as a volleyball, and that the physical education has a big impact in the development of intelligence as physical education includes a lot of activities and exercises, movements and sporting events . The scientists indicate the few movement and say (that the simple exercise has effect in developing the period of intelligence and believe that the brain has an advantage of the increased oxygen that comes from some statistics exercise.

So the athletic exercises develop in the individual health and vigor and courage, especially collective Games which are characterized by the system obedience Fidelity and responsibility, the purposes of physical education has been divided into three sections:

- The physical
- The mental
- the congenital

And through viewing the results that have been obtained through students (College of Physical Education, University of Diyala / Phase II) show that there is a difference in the level of ability to recognize rapid responses and reactions rapidly toward athletic attitudes, as there are some students have rapid reactions for the response and some of the others have medium reactions and the others have weak reactions as well as the slow variation in physical , tactical , psychological and self-potential skill abilities, and that due to several reasons (Iman Shihab, 1989).

- the scientific and social conditions have an impact in the level of intelligence and capacity varying where it
 was found through the presentation of the results that there is progress in the level of intelligence and as
 the sample members had received lessons in physical education, such progress is due to the lessons of
 scientific and practical methodology prescribed as well as the social and environmental conditions that
 the students live.
- the health conditions and fitness have a big impact in varying capacities



- each person is characterized by a number of attributes and each recipe distinguish a person from other people which form aside from his character so his own abilities and habits and thinking, culture and beliefs are elements of his character.
- the researcher believes that the emergence of this relationship with scrolling skill in direct correlation without other skills because it is a recipe approaching with the specialty of the prepared one in the levels of the players and it deals with competitor in one hand in his deception and interested in the movement of the colleague on the pitch, in addition, its level in the learners also depends on passing the ball to the competitors stadium in the appropriate blanks most often to get a direct point, all these factors combined led to be of significance with athletic emotional intelligence.

8. CONCLUSIONS

- 1. The best level of basic skills was for the transmission then scrolling from the top and finally scrolling from the bottom.
- 2. The level of the sample in the three basic skills is medium.
- 3. The level of athletic psychological adjustment was greater than the level of athletic emotional intelligence of the research sample.
- 4. Any improvement in the level of athletic psychological adjustment or athletic emotional intelligence indicates that there is improvement in the skill level or vice versa.

9. RECOMMENDATIONS

- 1. doing researches similar to another skills and other games, and for samples in other stages, even the sex of learners
- 2. Attention to the psychological aspect of the district educational units and finding means to develop these qualities.
- 3. Working to develop the level of educational programs and methods of different ways, to get a better assessment of that.

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SOLVING COMPILATION PROBLEM WITH TRUETIME TOOLBOX AND WINDOWS ENVIRONMENT DIFFERENT PLATFORM (WIN XP & WIN7 /32BIT -64BIT)

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Abstract

This Paper has discovered a way to solve compilation problem of True time toolbox, a third-party tools inserts to Matlab for simulation purposes. Using the laboratory matrices language (Matlab) version 7.12, True time toolbox 2.0 Beta, a problem arises in the scientific laboratories of Dijlah University College, where it is noted that computers running under Windows XP with low requirement , within the normal installation of Matlab and visuals studio, shown to be ineffective due to the failure of compilation of files in the Matlab after added and tools file in the Windows, plus effecting stopping of Mikropic controller and shows some errors. Proven way proved scalability tools to work within high performance and all applications and programs in the exist windows.

KEYWORDS: TRUE TIME. DUC. COMPILATION PROBLEM. SIMULATION. MATLAB.

1. INTRODUCTION

In simulation time may increase or falls short of real time, and therefore the TRUETIME mean simulation in exact time equal to true.

We must distinguish between the sense and meaning of the Real time computing is the computer operations in real time (as a telephone on the Open VPN or play games or any need to respond in real time and not break down computer operation. For example, while watching games on real time must not be interrupted for that part of the game would be lost during breaks while watching the game registered will not be affected by the outage because we can resume watching the moment of interruption. True Time is a Matlab/Simulink-based simulator for real-time control systems. This toolbox facilitates co-simulation of controller task execution in real-time kernels, network [1]. It has been developed at Lund University since 1999 [2]. The simulator software consists of a Simulink block library (Figure 1).

This toolbox provides possibility to write tasks as M-files, C++ functions or call Simulink block diagrams from within the code functions (Figure 2).

True Time is based on Simulink the graphical simulation environment of MATLAB, and consists of computer and network blocks The True Time blocks are connected with ordinary Simulink blocks to form a real-time control system. The main feature of True Time is the possibility of co-simulation of the interaction between the real-world continuous dynamics and the computer architecture in the form of task execution and network communication [3].



True Time blocks include generally used networks as Ethernet, CAN, TDMA, FDMA, Round Robin or Switched Ethernet). It supports simulation of Wireless networks (802.11b/g WLAN and 802.15.4 ZigBee) and battery-powered devices. In a brief description we can say, that True Time is a small library of simulation blocks which extends usability of Matlab/Simulink to simulate discrete network process control.

True Time is a software composed of many files some were written in Matlab language (extension. m) some were written in C++ (extension .cpp)and some are Simulink file models (extension .mdl) true time software need to be works and used in the Matlab environment.

In this paper we used A MATLAB product version (7.12 R2011a) Windows 7 & Windows XP(32/64bit). TRUETIME toolbox 2.0-beta7 compatible with windows. And tested on the PC's LABs of Dijlah University College its working without any problems recorded.

2. STARTING COMPILATION PART 1 IN THE MATLAB

2.1 CONFIGURE TRUE TIME EXTENSION

Install Matlab 7.12.0.635 (R2011a) or any Matlab version (R2010 a) or higher. Rune Matlab as an administrator. Copy the Kernel and Examples folders as shown in (Figure 3) from inside (True time 2.0-beta7) folder then paste it in current folder window in MATLAB (Figure 4). Double click (Kernel) folder in order to be the current folder. Type in the (Command window) >>true time or double click on true time .mdl in the (current folder> kernel folder). In order to open true time even if you are in different directory, you have to write a start-up code.

2.2 START UP FILE

Run Matlab as an administrator

Then click >file >new > script

Copy the code below and paste, correct the path (C:\Program Files\MATLAB\R2011a\kernel) according to your exact path to save the file to this path [4].

Setenv('TTKERNEL', 'C:\Program Files\MATLAB\R2011a\kernel')

% getenv('TTKERNEL')

Add path (getenv ('TTKERNEL'))

Add path (strcat(getenv('TTKERNEL'), '/matlab/help'))

Add path (strcat(getenv('TTKERNEL'), '/matlab'))

Save as start-up .m

Type in command window >>start-up

Then type >>true time

It will open even if you are in different directory.

3. START COMPILATION PART 2 IN WINDOWS

Copy true time folder to my Document in your computer

Go to system properties >Advance > Environment variables > System variables > path click edit , Copy the path of KERNEL files in the windows then paste it in the system variables >edit system variables> Path as shown in (Figure 6).



3.1 ADDITIONAL SOFTWARE

Additional software is Visual studio 2010, SDK and NET Framework.

After installed Visual Studio 2010 or higher version and set the default compiler C++ (Figure 6). Install Microsoft Windows SDK, Platform SDK, and .NET Framework. Microsoft Windows SDK, Platform SDK, and NET Framework SDK are <u>software development kits</u> from <u>Microsoft</u> that contain <u>header files</u>, <u>libraries</u>, samples, <u>documentation</u> and tools required to develop applications for <u>Microsoft Windows</u> and <u>NET Framework</u> [5].

3.2 SET DEFAULT COMPILER

Go to command window in Matlab, and type:

>>mex-setup, you will see a message to choose which compiler, if there are more than one compiler, to set C++ compiler as default compiler for TRUETIME toolbox (Figure 7).

>>make true time to compile kernel files in Matlab and windows (Figure 8).

4. RESULTS

Changing windows XP to windows 7 is not an option, because other programming languages (C++, turbo Pascal) been teaching in these Laboratories need windows XP to run in DOS environment. We installed additional software that make all products working correctly without any errors in windows XP and windows 7.

5. CONCLUSIONS

This paper show a new approach of installing toolbox composed of many files, used additional software without replacing computer's system, this method is alternative way to installing Higher languages and toolbox that requires system with high properties, on system with lower than their required properties. Free of errors capabilities to work with other applications and programs using same compiler and resources.

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APPENDIGES



Figure 1: TRUETIME Library



Figure 2: Wireless mode





Figure 3:Truetime folders



Figure 4: Current folder.







control in and in a	View basic information about your co	nputer	Edit System Variab	le	23
Device Manager	Windows edition		1247-72-2049	3	
Remote settings	System Properties	23	Variable name:	Path	
System protection Advanced system	Computer Name Hardware Advanced System Protection Remote		Variable value:	/PCEG\Documents\true	time-2.0-beta7\kern
	You must be logged on as an Administrator to make most of these cha	nges.		UN	
	Performance Visual effects, processor scheduling, memory usage, and virtual memory	ory	TEMP TMP	%USERPROFILE%\AppDa %USERPROFILE%\AppDa	ita\Local\Temp ta\Local\Temp
	User Profiles Desktop settings related to your logon			New Edit	Delete
		_	System variables		
	Setting the environment		Variable	Value	*
	Startup and Recovery System startup, system failure, and debugging information		FP_NO_HOST_C NUMBER_OF_P	NO 4	
	1 Settings		Path 2	C:\Program Files (x86)\PC	Connectivity *
	Environment Variat	les		New Edit	Delete
		Apply L		Oł	Cancel

Figure 6: Advance system setting





Figure 7: Undefined compiler



Figure 8: Compilation between kernel's files in Matlab and windows



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THE EFFECT OF EXERCISES OF TACTICAL AP-PROACHES IN THE DEVELOPMENT OF THE MOST IMPORTANT HARMONIC CAPABILITIES AND ITS RE-LATIONSHIP WITH CONFIDENCE FOR THE YOUNG-STERS BETWEEN THE AGE OF 12-14 YEARS

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Abstract

The research discussed the modern scientific methods in training sports and exercises used which contributed to the development of Harmonic capabilities that increase the confidence of the players, the research problem lies in the lack of using training methods, particularly exercises of tactical approaches in football training so researchers felt to prepare these exercises in a scientific field manner. The research aims to use exercises of tactical approaches in the development of the most important harmonic capabilities and its relationship to self-esteem among youngster's ages 12-14 years. Also touched on the importance of football training and the importance of exercises and researchers touched also to harmonic capabilities to self-confidence and to the age group of players aged (12-14 years). The experimental method was chosen as for suitability and nature of the problem, the researchers used devices and tools pertaining to their work. The researchers then reviewed the results they reached and discussed them and the development. Then researchers concluded that the used exercises have positive impact in the development of the most important harmonic capacity and its relationship to self-esteem among youngsters football.

KEYWORDS: EXERCISES. HARMONIC CAPIBILITIES. FOOTBALL .DEVELOPMENT.

1. INTRODUCTION

The rapid development of this game came as a result of using modern scientific methods in sports training and that contributed to the development of harmonic and skills capabilities and that the success of any process of training depends on the bases own in preparation Integrated Per effectiveness to reach for the high level of performance and the correct understanding of the achievement of the duties entrusted to him physically through coach and create a wonderful performers in tune and streamline the movement of the player individually and collectively, relying on mind reading between the players on the one hand and the coach of the other hand.

The game of football needs to use the exercises of an environmental skills approach to playing condition for reach the learners to correct performance in handling and rolling and scoring and change centers and control the ball and the positions of offensive and defensive and transfer the mechanism of the correct sprinting and attribution



and choose the appropriate locations and possession of the ball etc. The implementation of all these requirements serving the final outcome of the proper building for performance of the team (technical and the tactical), and it is an advanced state of learning by using the principle of the changing and random exercises in an approach environment to the playing condition.

Facilitating the task of the emerging and simplifying the plan in the learning process help to increase adherence between skills education and plan and this simplification of the plan helped him to teach skills performance among variables of playing and increase the sense of existing variables during playing.

Hence lies the importance of research being an attempt to research interest in the impact of the exercises of tactical approaches in the development of interoperability capabilities and then find a relationship between them and the self-confidence of young players between the ages of (12-14) years in football and through application to achieve this goal. As well as experience in the use of these workouts numbers and tactical skill, which is characterized by the rapid application of high precision, and to know the extent of their influence in the development of the speed of the basic skills of football.

2. RESEARCH PROBLEM

Through the experience of researchers in this field, they found that there is a problem in the weakness of the link between motor performance and skill and tactical performance and there is a big difference in the skills performance separately and between their performance during playing and this is what affects a big problem, namely isolation between learning of skills and between their performance through Playing positions which means that learning skills separately from playing variables or competition will lead to weakness in the process of skills performance while performing duties tactically, which has great importance in the outcome of the match or competition and thus lead to weakness in the correct tactical disposition of the skills and taking the appropriate capacity when facing playing situations which are variable and multiple and implementation of the required tactical duties.

3. RESEARCH GOALS

- 1. Prepare exercises of tactical approaches of football
- 2. Knowing the effect of tactical approaches in the development of the most important capabilities interoperability among youngsters between the ages of (12-14 years)
- 3. Knowing the relationship between tactical approaches and confidence of the youngsters football ages (12-14 years).

4. RESEARCH HYPOTHESES

- 1. There were statistically significant differences between tribal and a posteriori tests of the experimental group in the harmonic capabilities for football and in favor of a posteriori tests.
- 2. There is a significant relationship between moral harmonic capacity and confidence of the youngsters football aged (12-14 years)

5. RESEARCH METHODOLOGY

The researchers used the experimental method and its relevance to the nature of the search.

6. RESEARCH SAMPLE

a sample research Included on the 18 players from the players of Diyala athletic club junior class football and has chosen the intentional way out of 23 players, as were excluded (3) players as they are sample of the experience exploratory who moved then to the youth category and (2) players are goalkeepers for this ratio the percentage of the sample (78.26%).



7. IDENTIFY RESEARCH VARIABLES

After seeing the Arabic sources and Masters and dissertations of doctorate and some scientific research that have been used and contained on how to and the importance of harmonic capabilities and tests and measurement of self-confidence and the fact that "tests of the most important means of evaluating the players whether to stand at the level of their abilities (physical, motor, emotional, mental) and their level of skill for activities specialized that they practice "(Bastawisi, 1996: 288).

8. MEASUREMENT OF SELF-CONFIDENCE

This measure originally set (Rubin Philly) in 1986 and Promising Arabic image (Mohammad Hassan Allawi) and consists of measuring (13) paragraph, the athlete will answer on paragraphs of the list on a scale consisting of (9) scores and grades are (9,8,7, 6,5,4,3,2,1) determine the degree of confidence which is characterized by athletic player and less on the Richter scale (13) degrees and the degree of neutrality (65) degrees and higher degrees are (17) and the correction of scale is done through grades collected by player on the collection of paragraphs and the closer the total scores of the top class of \$ (117) also the player characterized by degree bigger than the capacity of self-confidence. Table 1 shows the values of reliability coefficient for the measurement of Self-confidence for football players.

Table 1 represents the values of reliability coefficient for the measurement of the self-confidence of the soccer players

rank	Psychological skills	Stability
1	Self confidence	0.81

9. TRIBAL TESTS

Tribal test have been done for the sample search after determining and fixing all the conditions in terms of place and time and the tools used and the support staff and so on Monday, 11.11.2014.

10. THE MAIN EXPEIMENT

The approach has been applied to research sample through their training units and in the days and times allocated to them, as the number of modules (36) and a training module and by (3) training units per week spread over 12 weeks as the time module (90 d) and exercise time was between (1 d - 15 d), has been working in the main experiment on Monday, 18/11/2013 and completed on Thursday 02/27/2014.

11. POSTERIORI TESTS

Posteriori tests were done for the research sample after determining and fixing all the conditions in terms of place and time and the tools used and the support staff and so on Monday, 03/03/2014

12. STATISTICAL METHODS

The researchers used statistical methods appropriate to deal with the resulting data through pre and post -tests by the system (spss).

13. DISPLAYIN THE RESULTS, ANALYZING AND DISCUSSED THEM

Showing results of synergy indicators of football in the pre and post- tests of a research sample of and analysis



Table 2 shows the values of the arithmetic means and standard deviations for pre and post tests and difference of arithmetic means and the proportion of development for tests of loco-motor indicators of football

Tests	Unit of meas-	Pre- test Post-test Difference			ost-test Difference		The propor-
	urement					between means	tion of devel- opment
Compatibility between the eye and the two legs al- ternately	Sec	8.797	1.067	7.662	0.898	1.135	12.902%
Compatibility between the eye and the two legs al- ternately right-footed soccer	sec	11.712	1.307	9.509	1.022	2.203	18.809%
Compatibility between the eye and the two legs al- ternately left-footed soccer	sec	11.537	1.172	9.966	1.065	1.571	13.916%
Compatibility between the eye and the two legs al- ternately pedicures football	sec	13.068	2.006	11.196	0.653	1.872	14.325%

It is found from the table (2) the values of arithmetic means and standard deviations and difference of arithmetic means and the percentage of development in the pre and post- tests of Harmonic capacity of football under discussion, for the purpose of knowing significance of differences between pre and post- tests of the indicators of harmonic capacity under discussion, the researchers used the appropriate statistical laws for data processing according to the data shown in table 3.

Table (3) shows the values of arithmetic means of the differences and sum of squares of the standard deviations from the average value of these differences and calculated and tabulated (T) and the significance of the differences between pre and post tests for indicators of Harmonic capacity tests

Tests	Unit of meas- urement			Calculated T	Tabulated T	Significance of differ-
						ences
Compatibility between the eye and the two legs al- ternately	sec	1.135	1.026	4.695	2.11	significant



Compatibility between the eye and the two legs al- ternately right-footed soccer	sec	2.203	1.221	7.652	2.11	significant
Compatibility between the eye and the two legs al- ternately left-footed soccer	sec	1.570	0.953	6.985	2.11	significant
Compatibility between the eye and the two legs al- ternately pedicures football.	sec	1.872	1.706	4.656	2.11	significant

Value of tabulated (T) (2.11) at the level of significance (0.05) and the degree of freedom (17)

Table 3 shows us the values of arithmetic means of the differences and the sum of squared deviations of the differences from the average of those differences and the value of calculated and tabulated (T) and the significance of the differences between pre and post tests for tests of Harmonic capacity indicators under discussion

The value of calculated (T) in all the tests and that their value is greater than the value of Tabulated (T) (2.11) at the level of significance (0.05) and the degree of freedom (17), and this means that there were significant differences between pre and post tests and in favor of post-test

Discussion of the results of tests of the harmonic capacity indicators of football:

Through the presentation and analysis of results in the previous tables noted that there are significant differences with statistically significant between pre and post tests for the research sample in indicators of synergy and for the benefit of post-test

and This shows the extent of the effect of exercises of tactically approaches which introduced in the training curriculum of the research sample, in the development of harmonic capacity indicators that a football player needs, and this was confirmed by (Qasim lazam, 2004: 46) "The movements carried out by the footballer require sufficient strength and accompanied at an appropriate speed and good flexibility and compatibility, and high compatibility So performance will be nice and consistent and consistency is precisely the concept of agile player

For the success of a football player in the integration of several basic skills in one frame and change of speed and direction, and this is referred to by (Hanafi Mahmoud 1994.60) " a football player needs to use his entire body for performance with the utmost perfection with the ability to change direction and speed in easy and smooth way, and the football player needs agility and compatibility to try to succeed in the integration of several basic skills in the context of one of skill or change to another or change of speed and direction

Through this, the researchers argue that the effect of exercises of tactically approaches in the development of compatibility indicators through morale differences that emerged in the post tests, through the development of the research sample and their Harmony in the performance of such workout but it is a modern style in football training especially in the Iraqi environment and this refers to by (Qassim Hassan Hussein 1990.14) "Any sporting activity related with functionality hardware of the athlete especially muscular compatibility where required many



adaptations such as neuromuscular adaptation . adaptation happens by doses of motivation, training and adjustment for each type of training which leads to increase readiness of the body or organic systems on the type of training and a willingness ,adaptation leads to increase capabilities of the compatibility of each movement or skill

through this research see that exercises contributed to increase the capacity of the players on the right skills performance as a result of the development of harmonic capacity indicators and this is consistent with what pointed him (Ali Salloum 0.2004: 146) "The more mistakes that freshmen did it is the inability to compatibility during performance of movements by involving muscles not required when performing movements causing disorders of movement so will be more confused

the researchers argue that exercise they chosen is similar to what happens in the game so that the player is restricted to specific area of pitch not fluent throughout the training module and this is what actually happens in modern football and considered a basic necessities for a football player to be able to keep the ball and move right between rows of competitors as well as to create opportunities for himself and for his team-mates, and this was confirmed (Mufti Ibrahim, 1994: 38) "as the football player must has the ability to determine the right place where can send the ball in a timely fashion in the required speed on according to the speed and distance each of his colleague who send the ball to him as well as giving the other team.

Display and analysis of self-confidence among a research sample

Table (4) shows the arithmetic mean and standard deviation of the results of self-confidence.

Name of club	Arithmetic mean	Standard deviation
Research sample	65.92	7.34

The table (4) shows the results of self-confidence as it reached the arithmetic mean (65.92) and the standard deviation of (7.34)

Displaying and analyzing the results of self-confidence with motor accordance: In order to achieve the goal which is identifying the nature of the relationship between self-confidence and synergy, Table (3) were presented and which shows the results of the correlation coefficient when compared to the tabulated value of (0159) between the degree of freedom (17) and standard error (0.05), a sample research were presented the correlation coefficient was (0,422).

Table (5) shows the correlation coefficients among a research sample for the variable of self-confidence with synergy

Name of club	Value of cal- culated R	Value of cal-Value of tab-Degree ofculated Rulated Rfreedom		Level of error	significance	
Research sample	0.422	0.159	13	0.05	significant	

Discussion the results of the level of self-confidence:

This can be explained in that the age level and cultural level of the players gives a positive dimension to their judgments about their abilities to complete the tasks assigned to them, as well as the experiences of success have had an important role in raising the level of self- effectiveness for the players, and the results of link on the significant correlation coefficients when compared to the tabular value (0159) with level of error (0.05) and the degree of freedom (17) and through the experience of researchers in the field of football, they attribute the emergence of correlations between self-confidence and harmonic capacity to exercises of tactical approaches that increase their personal convictions to perform all the tasks entrusted to them seamlessly, and behind outstanding performance will be the wishes of powerful and good causes and highly motivated by these players as said (Pandora 1977: 55) " whenever the level of self-efficacy higher , the achievement in the performance will be well and increase the likelihood of motivation players to make greater efforts to succeed in the task ", as indicated by the results of Tesler and Schwarz (the players with high self-confidence be at able to face the difficulties in life for



themselves without having to rely on the help of others and motivation to achievement stronger compared to those with self-efficacy of low-lying.

14. CONCLUSIONS

- 1. Tactical approaches exercise have a positive influence in the development of harmonic capacity among youngsters of Diyala Club for football aged (12-14 years).
- 2. Using exercises within the training curriculum at the stage of preparing has a positive impact in the development of effective motor, skills and tactical performance.
- 3. Self-confidence has an important role in providing what could be provided by the player during the games.

15. RECOMMENDATIONS

Through the findings of researchers which comes including:

- 1. Researchers recommend the adoption of special exercises in a compound style within the training curriculum for the special football players.
- 2. Attention must be paid to this exercise because it helps effectively the players with skillfulness.

Building training curricula dealing with psychological qualities for handball players and linked to performance of skills of the players.

- 3. Emphasis on the extent of the strong relationship between the coach and the player to assess the mental state of the player and self-confidence and control them and to overcome all the negatives that can result.
- 4. The modern methods of raising the level of self-confidence among the players through encouragement and inspire the spirit of enthusiasm and morale before the matches are important things that should be cared by the coach.

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APPENDIGES

Appendix1 1: Shows sample from exercises of tactical approaches

Exercise (1) (handling + rolling + scoring)

Exercise regulated between the halfway line of the yard to the goal where player (a) handled the ball to player (b), which handled it to (c), which passes it to the player (d) and then rolling the ball toward the goal.

Exercise (2) (rolling + handling + scoring))



the exercise regulated from the middle of the pitch and putt the ball between two fixed columns and the distance between them (14:00) and then works with the coach and then handling the ball roll away between other three fixed columns then scoring.

Exercise (3) (rolling + handling + scoring)

the exercise regulated from the middle of the pitch and in the form of two sets of players and the player of the group (1) handles the ball to the player of the group (2), which wheeled out between three fixed columns then played counter-productive to the player (1) which runs to the front after receiving the ball and then scoring.

Exercise (4) (handling + rolling + scoring)

Same as the previous exercise, but this time the player from group (2) work for Handling with coach

Exercise (5) rolling + handling + jogging and spin the ball

the exercise regulates inside the box 20× 20 m, where the players stand in two opposite sides, and the distance between them 10-15m, each group consists of five players and two fixed columns placed on the sides and the distance between them 10-15m, the ball with the player (1) and starts the exercise that the player (1) runs with the ball to the right until reaching the column and spins around it and then pass the ball to (6), which runs with it around the column which is on the right hand and pass the ball to (2) and stands behind the group.

Exercise (6) (handling + rolling + scoring)

Exercise starts from the halfway line. Handling the ball from the player (a) to the player (b) then one-touch return the ball to the player (a) and then handling the ball again from player (a) not the

player (c)which Wheel the ball then handling it to the(b) which is responsible for scoring to the goal. The exercise repeated with another player with switching the centers of players.

Exercise (7) (handling + rolling + scoring)

The exercise regulated from the middle of the pitch and the player (a) runs to receive the ball which coming to him from (c) during running and then ran the ball between the three winding columns and scoring towards the goal. And the player (b with d) do the same exercise.

Appendix 2: Shows list of state of sports confidence

Design: Robin Philly

Translation: Mohammad Hassan Allawi

Draw a circle around the number that you think you deserve actually "in your self-confidence at the moment of pre-subscription in athletic competition directly compared with ideal player from your point of view . and who deserves the highest level of sport confidence before participation in the competition directly, which amounted to (9) degrees .

rank	statements	deg	rees							
1	during performance of motor skills which is necessary to achieve excellence through sports competitions	1	2	3	4	5	6	7	8	9
2	In the ability to make critical de- cisions during athletic competi- tion	1	2	3	4	5	6	7	8	9
3	In the ability to perform under the stress of competition	1	2	3	4	5	6	7	8	9
4	The ability to implement suc- cessful plans in the competition	1	2	3	4	5	6	7	8	9



5	The ability to focus well in order to realize success		2	3	4	5	6	7	8	9
6	The ability to adapt to playing different positions in order to re- alize win in the competition		2	3	4	5	6	7	8	9
7	In in ability to perform goals re- lated with competition		2	3	4	5	6	7	8	9
8	In ability to be successful "in competition		2	3	4	5	6	7	8	9
9	In the ability to think and to re- spond successfully during the competition	1	2	3	4	5	6	7	8	9
10	The ability to meet the challenge during the competition	1	2	3	4	5	6	7	8	9
11	In the ability to be successful, "based on the preparation for this competition	1	2	3	4	5	6	7	8	9
12	In ability of continuing the good performance to be a good suc- cessful in the competition	1	2	3	4	5	6	7	8	9
13	In the ability to try to succeed, even if the opponent stronger than me	1	2	3	4	5	6	7	8	9



THE EXTERNAL FEEDBACK NUTRITION (VER-BAL-VISUAL) AND THEIR IMPACT ON THE AC-QUISITION OF LEARNING SOME BASIC SKILLS IN TENNIS FOR BEGINNERS

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Abstract

-The research aims to identify the impact of using external feedback nutrition (verbal-visual) and their impact on the acquisition of learning some basic skills in tennis. The research hypothesis has been confirmed that there were statistically significant differences between pre and post tests for the two sets of control and experimental research in experimental research. The research sample included students of the second stage and the number (40) students.

- the third section of the research included methodology and field procedures, where the researcher used the experimental method to achieve the research hypothesis.

-the forth section has included the presentation of search results, analyzing and discussed them.

- the fifth section included on the conclusions and recommendations reached by the researcher and the most important recommendations is the use of external feedback nutrition (visual-verbal) and their impact on the acquisition of learning some basic skills in tennis for beginners.

KEYWORDS : EXTERNAL FEEDBACK NUTRITION . VISUAL . VERBAL . EXTERNAL NUTRITION . BASIC SKILLS . BEGINNERS .

1. INTRODUCTION

the development in the mathematical sciences and access to a good level and then win in international forums is important for all teams in all of the games, including the game of tennis and that this progress is not a coincidence but it is a result of research and investigation and the efforts of scientific and technical being made by experts and trainers in the sports field regularly and deliberate pace and for long times to reach what is best to serve the players.

The game of tennis is one of the games that have privacy in their requirements, especially with beginners and the use of feedback nutrition suitable for them play an important role in the educational process in the acquisition of learning some basic skills in tennis.

Hence the importance of research by identifying the impact of external feedback nutrition (visual-verbal) to acquire, learn some basic skills in tennis for beginners.



from here the researcher noted for being a former player the presence of weakness among the students of the second phase of the beginners in the performance of some of the basic skills in tennis and in particular skills (the frontal ground strike and the background strike) due to not using the feedback nutrition which is suitable to their levels.

The researcher aims to determine the impact of external feedback nutrition (visual-verbal) to acquire learning some basic skills in tennis for beginners.

The research hypothesis states that there were statistically significant differences between pre and post tests for the two sets of control and experimental research

2. RESEARCH METHODOLOGY

The researcher used the experimental method by system style consists of two equal groups for suitability to the nature of the research problem.

3. RESEARCH SAMPLE

The researcher choose the research community, which represents the students of the second phase totaling 220 students, while the research sample (40) students, which means the proportion of the sample to the original community (18%).

Test (hewite) of the foreground and background strikes in tennis: (1: 252) and (224: 6)

The purpose of the test: to measure the skill of the foreground and background strikes in tennis.

The level of age and sex: suitable for students in middle school and university students from beginner to advance.

Actions:

- 1. Planning the tennis court from one side as shown in the picture (1).
- 2. fix a rope from a terminal sides in the network and parallel to it and with height (7) feet from the ground, and (4) feet from the network
- 3. Draw (3) parallel lines between the transmission line and base line so that the distance between lines 2/1 and 4 feet.
- 4. Numbers (1, 2, 3, 4 and 5) refers to the grades assigned to each of the regions that where the ball fall.
- 5. The tester stands on the center mark (Center Mark) which is located on the middle of the base line at the point (a), while the teacher stands at the front half of the field at the point (b), which is located near the halfway line and with a basket filled with reels tennis racket and tennis.
- 6. the teacher strike the ball by racket to the tester behind the transmission line, which moves from place to take the appropriate mode to hit the ball by the way of foreground strikes to pass over the net and down the rope to fall in the areas shown in figures in half of the pitch in front, trying to achieve the highest score in each time in the region number (5).





Image (1) describes the test (hewite) to measure the ability of the two strikes frontal and background

- 7. The tester repeat the performance as before (5) consecutive attempts for training on the test.
- 8. The test started by the implementation of performance (10) times ;(10) balls in the same way.
- 9. In all attempts the teacher strikes the ball in a uniform manner and legality so that they are similar as far as possible for the balls in the positions of the actual gameplay.

GRADES CALCULATIONS:

- 1. The conditions of the test that the ball has crossed the network under the rope and fall to the ground inside the stadium in specific regions respectively and shown in the picture (1) and given them different degrees of upward calendar ranging from (1-5) degrees.
- 2. After a survey of the total summation of ten attempts to extract the arithmetic mean for each player individually, and then collect all means and extract one arithmetic mean of the group.

Test of the foreground strike:

The purpose of the test: the ability to measure the ability of the background strike in tennis.

The level of age and sex: suitable for students in middle school and university students.

Procedures: apply the same procedures as in the first test with the exception of the method used to hit the ball.

Grades calculations: grades are calculated in this test in the same way as in the first test

4. FIELD PROCEDURES OF THE RESEARCH

The researcher implemented vocabularies of the curriculum for the experimental group using the external feedback nutrition (visual-verbal), while the control group applies traditional approach taken in college. Vocabulary curriculum amounted to (12) and educational unit at a rate of 90 minutes per unit. Note that the two pre and post-tests has not been calculated with the curriculum weeks.

Tribal tests: Has been testing at the day 01/03/2013 nine o'clock in the morning to measure the ability of skill of some skills of the tennis game (skill of foreground strike, skill of background strike) on the courts of the faculty of physical education - University of Diyala, and using tests (hewite) for the two foreground and background strikes and under the supervision of researcher and assistant team work.

Posttest: at the end of the second semester on 30/05/2013 at nine in the morning post-test was performed for the control and experimental groups were used method of induction, encouragement and competition for good performance and get the highest score among the testers by the teacher and researcher and the students.



5. DISPLAYING RESULTS, ANALYSIS AND DISCUSSING THEM

This section deals with the results of tests undergone by the two sets of research (control and experimental), and deals with the analysis and discussion of the results that have been reached, and we can say that the two sets of research are equal in level through what is shown in the table below:

Table (1) shows equal sets of research results of the tribal tests

tests	The control group		The experimental group		Value of calcu- lated T	Value of tabulated T
The foreground strike (not significant)	0.32	0.16	0.37	0.11	0.29	2.02
The background strike (not signifi- cant)	0.24	0.21	0.15	0.17	1.17	2.02

Degree of freedom (38) and limits of confidence (95%).

DISPLAYING AND ANALYZING THE RESULTS OF TESTS OF THE FOREGROUND AND BACK-GROUND STRIKES:

Table 2 below shows the statistical results of the score of the control and experimental groups and percentages, between the pre and post tests to determine the impact of the acquisition of learning skills in the performance of the foreground and background strikes of each group separately.

Table 2 shows the results of pre and post- tests of the control and experimental groups in the performance of skills of the two strikes (foreground and background).

The skill	Tribal test		Post-test			
	The arith- metic mean	The stand- ard devia- tion	The arith- metic mean	The stand- ard devia- tion	Value of calculated T	Value of tabulated T
The frontal control group (significant)	0.32	0.16	3.33	0.29	36.04	1.73
The frontal experi- mental group(sig- nificant)	0.37	0.11	4.07	0.21	55.88	1.73
The background control group(sig- nificant)	0.24	0.21	2.88	0.16	4.33	1.73
The background ex- perimental group(significant)	0.15	0.17	3.35	3.35	5.44	1.73

Table (2) shows the results of tribal and post-tests to measure the extent of acquiring and learning skills of the two strikes, foreground and background of the control and experimental groups. the results of the arithmetic mean and standard deviation of the control group in the pre-testing of the performance of the skill of the foreground strike were (0.32) and (0.16), and for the post- test (3.33) and (0.29). The value of calculated (t) to know the significant differences in the arithmetic means between pre and post- tests (36.04) which is greater than the tabulated value



which is (1.73) and the degree of freedom (19) and confidence limit (0.95), which indicates the presence of significant differences in favor of the post-test.

The results of the arithmetic mean and standard deviation of the experimental group, which received an external feedback nutrition (visual- verbal) for tribal test was (0.37) and (0.11), and for the post-test reached (4.07) and (0.21) and the value of the calculated (t) (55.88) which is greater than the value of tabulated T (1.73) and the degree of freedom (19) and confidence limit (0.95), which indicates the presence of significant differences to the benefit of post-test. The results of the arithmetic means and standard deviation of the control group in the pre-testing of the performance of the skill of the background strike was(0.24) and (0.21), and to post-test (2.88) and (0.16). The value of the calculated (t) to see significant differences of arithmetic means between pre and post- tests (4.33) which is greater than the tabulated value which is(1.73) and the degree of freedom (19) and confidence limit (0.95), which indicates the presence of steel tests (4.33) which is greater than the tabulated value which is(1.73) and the degree of freedom (19) and confidence limit (0.95), which indicates the presence of significant differences in favor of the post-test.

The results of the arithmetic mean and standard deviation of the experimental group in the pre-test of the performance of the skill of the background strike (0.15) and (0.17), and of the post-test reached (3.35) and (0.35) and value of calculated (t) (5.44) which is greater than the tabulated value which is (1.73) and the degree of freedom (19) and confidence limit (0.95), which indicates the presence of significant differences in favor of the post-test.

Table 3 compares between the results of the post tests and the value of (t) between the control and experimental groups.

The group	Post-test				
	The arithmetic mean	The standard devi- ation	Value of calculated (t)	Value of tabulated (t)	
Foreground control group	3.33	0.29	19.14	2.02	
Foreground experimental group	4.07	0.21	19.14	2.02	
Background control group	0.88	0.16	11.44	2.02	
Background experimental group	3.35	0.35	11.44	2.02	

to learn the best in the acquisition of learning skills the two strikes ; foreground and background as shown in table 3, the researcher used the t-test to see significant differences between them .the results showed that the value of the calculated (t) between the two groups control and experimental in the post tests for them in the performance of fore-ground strike (19.14) which is greater than the tabular value which is (2.02) and the degree of freedom (38) and confidence limit (0.95), which indicates the presence of significant differences between them and in favor of post-test for the experimental group.

The results of the value of calculated (t) between the two groups (control and experimental) in the post tests between them in the performance of the strike, the background has reached (11.44) which is greater than the tabular value which is (2.02) and the degree of freedom (38) and confidence limit (0.95), which indicates the presence of significant differences between them and in favor of post-test for the experimental group.

Discussion the results of tests of the two strikes (foreground and background):

when discussing the results that have been presented and analyzed in tables (2) and (3) for the posteriori tests for the two groups (control and experimental) show that there is a significant effect in the acquisition of learning skills of the two strikes (foreground and background) and in favor of the experimental group, the researcher attribute that to the adequacy of the educational modules and implementation of its vocabulary by investing time of learning and repeatability attempts and feedback nutrition which is suitable and positive as well as demonstration the nature of



the research sample. The results showed that the group that received the external feedback nutrition (visual-verbal) was a very effective in the acquisition and learning and this is due to the effectiveness of the impact of receiving feedback nutrition (visual-verbal) during the implementation of the vocabulary of educational units and the method of presentation and its importance for beginners, the modalities of viewing and to provide information (feedback) to learners to be of interest is positive and significant at the level of learning, " (Jamal Saleh) and (Abbas Ahmed al-Samarrai) agree that there are three forms or methods by which to communicate information to the learners, namely, (visual information – audio information -sensory information) where tested (Martens) 1976 the way of viewing movies and living model in giving information and after several attempts he found that the visual way is the best way for beginners than the audio one and from others, while Carb in 1978 has emerged that external information (visual-verbal) visual better than audio in achieving the level of learning, (but visual with verbal explanation) is the best way to learn, while (Lockhart 1966) found that visual information with verbal explanations is very important in the first learning stages and verbal Information be the best in the stages of advanced learning "(43: 2).

The external feedback nutrition (visual-verbal) suitable for beginners in any game and be by coach or teacher or even by the coaching staff or by an expert and be of two types:

A- Final / is given after the end of the performance.

B- a continuous / is given during the performance. (3:54)

(Qasim Hassan Hussein) said: "the information that can be provided to the learners after the end of motor duty, be either about the nature of motion performance or on the results of the effectiveness of learning and steps of learning are often positive if given by the specialists (4: 306).

Learning the same skills by using external feedback nutrition to accelerates the rate of learning, and that the coach and training devices provide the learner external feedback nutrition for the purpose of improving the performance and learning (5: 132).

6. CONCLUSIONS

- 1. Emergence a clear improvement in the acquisition of learning the two sets of research (experimental and control groups) for two basic skills (foreground and background strikes).)
- 2. Superiority of the experimental group that received the external feedback nutrition (visual-verbal) in the amount of gaining the learning on the control group which used the traditional method of learning (ordering) in basic skills (foreground and background strikes) in the post tests.

7. RECOMMENDATIONS

- 1. Emphasis on the use of external feedback nutrition (visual-verbal) in the acquisition of learning basic skills in tennis, especially the two skills (foreground and background) for its positive impact in the learning process, especially with beginners.
- 2. Doing similar researches using external feedback nutrition (visual-verbal) to acquire other basic learning skills, especially with beginners.

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