



### International

### Journal of Recent Research and Applied Studies

(Multidisciplinary Open Access e-Journal)

# Relationship of Some Indicators of Effectiveness by the Physical Installation of the Transmission & Impact of Skill with Some Psychological Skills to Deliver Roller Table Search & Descriptive

#### Dr. Agharid Salim Abdulridha

Faculty of Tourism and Hotel Management, University of Mustansiriya, Baghdad, Iraq.

Received 5th October 2014, Accepted 10th December 2014

#### Abstract

The study aimed to identify the relationship between indicators of physical structure and the percentage of effectiveness of skill transmission as well as to identify the impact of some of these indicators and psychological skills to deliver when players teams of Iraqi universities within the qualifying final for the championship of the Republic of table tennis for the year 2010-2011 has been selected sample way intentional, where included on the (12) players from the teams of Iraqi universities who qualified for the finalists, namely, (Mustansiriya University, the University of Qadisiyah, University of Technology, the University of Baghdad) and after processing the results statistically concluded the researcher that there is a correlation significant differences between some of the indicators of physical structure, namely, (weight, fat, fluid, muscle) and the ratio of efficacy to the skill of the transmission and there are differences animate significance between some of these indicators (fluids, muscle) and achievement and between some psychological skills (visualization, relaxation, anxiety, self-confidence, motivation) and between achievement while did not show differences animate significance between the two indicators of weight and fat and focus attention and between achievement among a sample of research and researcher recommended the periodic measurement of indicators of physical structure for the players as well as maintaining be represented within normal limits and ideal for the athlete as well as an emphasis on coaches attention skills psychological during training because of their importance in the movement and activity the better performance and thus get better results and achievements.

Keywords: Body construction signs, Effectively ratio, Psychological skills, Expedition skill, Achievement.

© Copy Right, IJRRAS, 2014. All Rights Reserved.

#### Introduction

Require the nature of the sports competitions of the individual sports need to use physical abilities and skill and tactical and psychological integrated manner so as to try to make the best possible level, because sporting excellence depends on the extent to which the players of their abilities psychological toward at least take advantage of their physical abilities, psychological help individuals to mobilize their energies and physical abilities to achieve the feat the better, so the psychic energy in turn affects physical energy brain be vigilant when it affects the members of the body. The ping-pong games that were based in the evolution to the other sciences. This game is characterized by its proximity to many of the diverse skills that differ technically distinctive characteristics of these skills on the one hand and through the installation of physical indicators of table tennis player from the other hand. Indicator physical structure as weight and percentage of fat and muscle and fluids contribute despite the different proportions of the player to the last in the evolution of

#### Correspondence

Dr. Agharid Salim Abdulridha, E-mail: nadhimyousif@yahoo.com. technique with different skills to the table tennis player. Here lies the importance of research as an attempt to find out the relationship between indicators Association physical structure and efficiency ratio for the skill transmission in addition to identify the impact of these indicators and psychological skills to deliver a sample search.

#### **Research Objectives**

- 1. Identify some indicators of physical installation teams have players Iraqi universities to table tennis.
- 2. To identify the proportion of effective teams with players Iraqi universities to table tennis.
- 3. Identify the level of some psychological skills among players teams of Iraqi universities to table tennis.
- 4. Identify the relationship between some of the indicators of physical structure and efficiency ratio for transmission to the skill of the players, teams of Iraqi universities to table tennis.
- Identify the impact of some indicators of physical structure and some psychological skills to deliver teams have players Iraqi universities to table tennis.

#### Hypotheses

- 1. Lack of a statistically significant relationship between some indicators of physical structure and efficiency ratio for transmission to the skill of the players, teams of Iraqi universities to table tennis.
- 2. Lack of statistically significant differences between women with some signs of physical structure and achievement among players, teams of Iraqi universities to table tennis.
- 3. Lack of statistically significant differences between women with some psychological skills and achievement among players teams of Iraqi universities to table tennis.

#### **Research Methodology**

The researcher used a descriptive approach to the suitability of the nature of the research. Sample Search were selected sample way intentional and consisting of players teams of Iraqi universities and braved (4) universities, namely, (Baghdad University, University of Technology, Mustansiriya University, the University of Qadisiyah) co-starring Iraqi universities reel table and qualifying for the finalists have been The number of players (12) for the player, and table 1 shows some sample specifications:

**Table I.** Homogeneity of the sample in some measurements under discussion

Variables Statistical methods	Height (cm)	Chronological age (years)	Age Training (years)
Mean	173.75	22.08	4.08
Mediator	173.5	23	4
Standard deviation	5.29	2.53	1.16
Coefficient sprains	0.63	0.27	0.22

It is noted that the torsion modulus values ranged between +1, -1 and showed that the occurrence of these values within the values of the natural curve (normal distribution), which gave it an indication of the homogeneity of the sample individuals, have been excluded from the process of mass index homogeneity being one indicators under Search study.

#### Tools, Devices and Aids used in the Research

- Type video camera (Sony) number of Japanesemade (4).
- 2. Tripod for the camera number (4).
- 3. Hall Interior Table Tennis.
- 4. Number of tables (2).
- 5. Metal measuring tapes (1) scale (25 m).
- 6. Legal balls table type (STIGA) the number of Chinese-made (10).
- 7. Rackets table number (6)
- 8. Tables arbitration number (2).
- 9. Plate numbers for the announcement of the results (2).
- 10. Electronic device Body Balance Comfort F5 German origin<sup>1.</sup>
- 11. laptop computer Laptop type (Pentium 4, Dell) Malaysian-made.
- 12. Arab and foreign sources.
- 13. Form to collect information<sup>2</sup> filled by researchers and support staff<sup>3</sup> own measurements and indicators of physical structure sample search.
- 14. International information network (Internet).

## Measurements and Tests that have been Adopted in the Research

#### **Measuring Height**

The length measurement from a standing position measurement moderate, so that the vultures beside the body, and are measuring mediated ruler, it stands the laboratory so that touches the vultures and rear and waved at the shoulder and back of the head the runway, and it must be the head cum It is natural that the situation placed machine and a ruler on top of the laboratory so that the angle with the ruler listed (Radwan: p 73).

#### **Test Measuring Installation Bodywork Components**

The purpose of the test: measuring the percentage of fat and muscle, fluids and weight and the number of calories in the body. Tools and equipment: electronic balance. electronic display Performance way: climb laboratory barefoot on the device after the introduction of an electronic device information to the length that has been taken in advance for each player and the age and sex and then pressing the button ok)), and begins to read the player. Recording Mode: The Registrar shall register the numbers that appear on the display screen for each measurement begins by giving weight and body fat, and muscle and fluid then the last thing the amount of calories, the memory capacity of the device (8) players.

#### Measuring of Psychological Skills

Has been used measure of psychological skills<sup>4</sup>. designed by Stefan and even John Albinson and Christoprchambrok in 1996 to measure some aspects of mental (psychological) are important for the performance of sports is the ability to perception and the ability to relax and the ability to focus attention and the ability to

cope with anxiety and self-confidence and motivation of sporting achievement. And includes a scale (24) is all the skill of psychological skills six represented by (4) the words and the athlete to answer phrases measure on a scale hexagonal grades (apply to very much, greatly, moderately, to a small degree, a degree very few, do not apply Ali completely) (Allawi: 1989. S543-545) Is collected degrees each dimension separately and the closer the degree of player-class majority in the amount of (24) in each dimension whenever dl on the distinctiveness characteristic measured by this dimension, and the lower the degree of player whenever dl on the need to acquire more training on the skill of mental measured by this dimension. This meter dish in the Egyptian environment by Mohammad Hassan Allawi, and the researcher technology and apply it to the Iraqi environment has been extracted and scientific transactions as follows. Stability coefficient has been found by applying the measure and re-applied after a week and the value of the reliability coefficient 0.91 when applied to a group of athletes who represented the university teams in different sports (football, Penta football, basketball, plane, badminton, tennis, handball) totaling (88) player. Honesty the scale was presented to a group of experts with specialization in sports psychology<sup>5</sup>. as well as the use of sincerity test when applying the measure in conjunction with some of the metrics that measure some similar dimensions. Objectivity since he has been a measure of psychological skills to a group of experts from psychologists that proves the merits of the measure.

#### **Efficiency Ratio**

Extraction ratio was effective performance by viewing the filming of the video games where the researcher has designed an evaluation form to the skill of

the transmitter<sup>6</sup>. the effectiveness of table tennis, has been presented a group of experts<sup>7</sup>.

#### **Experience Exploratory**

has been conducting the experiment reconnaissance by the researcher and team assistant on Monday 11/4/2011 in the halls closed training center for the Union of Iraqi central players clubs for a class of applicants for the purpose of standing on the difficulties and obstacles that may face the researcher and to verify the extent of safety and health measures in place have been conducting the experiment exploratory first (5) players to verify the safety and health of a balance-mail as was the test Expeditionary second (10) players and distribution form through the scale Almhart psychological and filled by players.

#### Steps of the Research

Test was performed with the help of physical indicators installation team assistant were distributed form scale psychological skills and filled by a sample search on Tuesday 19/4/2011 in the fitness room at the University of Technology. Video capture was filmed qualifying matches for the final sample search on Tuesday and Wednesday, 20-21 / 4/2011, using cameras by placing (2 camera) on both sides of each table dedicated to the game and filming the full game and then analysis of skill transmission of the match by the researchers according to the form that has been designed in a manner seen. Statistical means the bag was used statistical program (Spss) for statistical treatments were used as statistical laws following Mean, Median, Standard Deviation, Pearson correlation coefficient, analysis of variance (F-test) for the corresponding samples and test less significant difference (LSD).

#### **Analysis and Discussion**

**Table II.** Monuments statistical indicators physical structure under study and the proportion of the transmission efficiency of the skill of the research sample

University	Labs Statistical Variables	The unit of Measurement	Indicator s	Efficiency ratio	The correlation coefficient	Significance
	Weight	Kg	73.97		0.006	Significant
Mustansiriya	Fat	Grams	14.28	66.43	0.07	Significant
	Fluids	Liter	66.67		0.98	Significant
	Muscle	Grams	51.03		0.99	Significant
Qadisiyah	Weight	Kg	74.17		0.9	Significant
	Fat	Grams	13.17	64.07	0.99	Significant
	Fluids	Liter	62.97	64.07	0.87	Significant
	Muscle	Grams	49.4		0.96	Significant
Technological	Weight	Kg	63.8		0.38	Significant

				59.782		
	Fat	Grams	8.40		0.95	Significant
	Fluids	Liter	57.4		0.58	Significant
	Muscle	Grams	44.8		0.97	Significant
Baghdad	Weight	Kg	67.1		0.15	Significant
	Fat	Grams	17.73	50.69	0.34	Significant
	Fluids	Liter	47.77	50.68	0.66	Significant
	Muscle	Grams	39.03		0.99	Significant

Table II that the value of (t) calculated for the installation of physical indicators and efficiency ratio is greater than the value (t) tabular and this means that there is a strong correlation between the indicators physical structure under study and the percentage of effectiveness. She attributes the researcher so that the indicators installation physical impact on the effectiveness of the transmission performance, where the index weight is of great importance in the movement and performance of the athlete, "where is the question of gain or loss of weight when the athlete is a problem in itself for being accustomed to the nature of certain eating, also pose as well as a dilemma for the coach, it cannot accurately control the player throughout the day "(Been: p 113). As well as for variable fat lies in that the increase in fat adversely affect the athlete and makes movement slower and is flexible and agile through "link fat weight sports and various organs" (Hamdan 0.2010, p13-14). As for variable fluid, the significance lies in the continuing need him for the body, where that "the process of sweating during the performance of physical effort to lose large amounts of fluids and salts, making decreasing in the body of the sports lead to health risks (Gighton 0.1997, p 1293). And variable muscle plays an important role in the overall movement of sports in general and the performance of a certain movement, in particular, where (increasing the number of myofibrils, strength and energy regular training and programmed) (Lima, 2009, p14-29). Can be seen from the above that whenever indicators physical structure within normal limits and this led to the optimum access to the effective performance of the optimal.

Table III. Monuments statistical indicators physical structure under study and psychological skills among a sample search

Statistical parameters Variables	Source of variation	Sum of squares of deviation	Degree of freedom	df	Mean Square	F	Sig
	Weight	Between Groups	239.13	3	79.71	0.418	Not significant
		Within Groups	1523.16	8	19.395	0.418	
	Fat	Between Groups	133.83	3	44.61	1.536	Not
Indicators		Within Groups	232.24	8	29.03	1.330	significant
physical structure	Fluids	Between Groups	621.06	3	207.02	6.372	Not significant
		Within Groups	259.9	8	32.487	0.372	
	Muscle	Between Groups	260.55	3	86.85	19.18	Not significant
		Within Groups	36.23	8	4.528	19.18	
	Visualization	Between Groups	34.24	3	11.41	6.518	Not
Psychological skills		Within Groups	14.01	8	1.75	0.316	significant
	Relaxation	Between Groups	43.66	3	14.55	8.314	Not
		Within	14.01	8	1.75		significant

		Groups					
	Focus attention	Between Groups	20.91	3	6.97	0.506	Not significant
		Within Groups	110.01	8	13.75		
	Anxiety	Between Groups	50.91	3	17.97	12.436	Not significant
		Within Groups	17.34	8	1.44		
	Self- confidence	Between Groups	41.99	3	13.99	9.325	Not
		Within Groups	12.01	8	1.5	9.323	significant
	Motivation	Between Groups	22.91	3	7.63	11.448	Not
		Within Groups	5.34	8	0.67	11.440	significant

Value (F) spreadsheet (4.0662) when the error ratio (0.05)

Note from the table III that there are significant differences between the indicators (fluids, and muscle) and achievement attributes researcher so that the appearance of the positive relationship between indicators of physical structure and the percentage of effective performance, it thus affect positively on the outcome of the games and get the best achievement and this was confirmed by (Alon, 2008) that "the effectiveness of performance are important things and basic access to achieve good results (Alon, 2008, p 144). while did not show significant differences between the indicators (weight and fat) and achievement and attributes the researcher to the fact that all the players were within normal limits optimal and therefore did not appear to have differences.

She also appeared significant differences in

psychological skills (visualization, relaxation, anxiety, self-confidence, motivation) and attributes the researcher to the presence of individual differences in psychological skills between Allaobei and that these skills have an impact on performance and therefore on the achievement, where the skill of visualization helps the player to evoke optimized performance to mind and apply it in a practical way and this was confirmed by (Samad, 2000, 2000) that "the perception of mental helps the player to visualize good performance immediately before entering the competition, and contributes to call the sense in optimizing performance" (Samad: p 200). The skill of a relaxing effect on the results of performance because it contributes to reduce the levels of stress and muscle tension and the ability to relax to adjust the level of arousal and emotion and this was confirmed by (Mohamed Larbi Shimon 0.1979) in the "relaxation leads to a reduction in the influence of the response to the stress and help to reach the level optimization of tension that contributes to raise the morale and improve their level of performance and thus achieve win-win "(Shimon 0.1979, p 200). The skill of the ability to cope with anxiety importance in enabling the sports of access to mental condition prevent the entry of negative thoughts and separated the performance and this was confirmed by (Schmidt. A, 1995) that the "high level of anxiety resulting dispersion of attention and then to the lower level of performance" (Schmidt: S100-112).

The skill of self-confidence case unconscious owned by the player, flies toward good performance ability and high fastness away from fear and hesitation, and this was confirmed by (Mohammed Sidky Noordin, 1994) that "the self-confidence of the important skills in the field of sports due to its impact on the performance of the players and the confidence of the sports in capabilities represent an important source of positive energy to achieve positive psychological "(Muhammad: 1994, S89-99).

As for the skill of motivation is the key in all sporting activities due to the fact that all behavior behind defended and defended achieve better achievement lies behind the power of motivation interior, and this was confirmed (Hantoush Maaon Thanon, 1987) that "the motivation mental athlete is doing a structured and continuous for to win "(Hantoush: 1987, p 137).

While not appear there are significant differences in the skill focus of attention, which is a vital dimension in the areas of training and competition, and attributes the researcher so that the game table tennis games the individual that you need to focus attention and that the players are characterized automatically to those skilled though it varies from player to another by individual differences.

Table IV. Statistical parameters to test less significant difference (LSD) totals Search Indicators physical structure under study

Indicators	Totals	Mean	Qadisiyah	Technological	Baghdad	Value (L.S.D)
Fluids	Mustansiriya	66.93	*3.96	*9.46	*19.16	(=131=)
	Qadisiyah	62.97	-	*5.5	*15.2	10.75
	Technological	57.47	-	-	*9.7	
	Baghdad	47.77	-	-	-	
Muscle	Mustansiriya	51.03	1.63	*6.23	*12	
	Qadisiyah	49.4	-	*4.6	*10.37	4.012
	Technological	44.8	-	-	*5.77	
	Baghdad	39.03	-	-	-	

Value (T) spreadsheet (2.31) under the 0.05 level and at 8 degrees of freedom

Note from Table IV that most of the universities have significant differences among them, and this confirms that there are differences in the proportion of indicators, including which conferred for advanced

positions in the tournament namely that the university, which ratios are indicators better than the other to have opportunities to perform better and thus to obtain the best completion.

Table V. Statistical parameters to test less significant difference (LSD) totals search in psychological skills under study

Indicators	Totals	Mean	Qadisiyah	Technological	Baghdad	Value (L.S.D)
Visualization	Mustansiriya <sup>1st</sup> .	18	1.33	*3.33	*4.33	( <b>L</b> .D. <b>D</b> )
	Qadisiyah <sup>2nd</sup> .	16.67	-	2	*3	2.496
	Technological <sup>3rd</sup> .	14.67	-	-	1	
	Baghdad <sup>4th</sup> .	13.67	-	-	-	1
Relaxation	Mustansiriya	21.33	1.33	*4.66	*4	
	Qadisiyah	20	-	*3.33	*2.67	2.496
	Technological	16.67	-	-	0.66 -	
	Baghdad	17.33	-	-	-	
Anxiety	Mustansiriya	20.67	1.67	*2.34	*5.67	
-	Qadisiyah	19	-	0.67	*4	2.267
	Technological	18.33	-	-	*3.33	
	Baghdad	15	-	-	-	
Self-	Mustansiriya	21.33	1.33	*3	*5	
confidence	Qadisiyah	20	-	1.67	*3.67	2.311
	Technological	18.33	-	-	2	
	Baghdad	16.33	-	-	-	
Motivation	Mustansiriya	21.67	1.34	*2.67	*3.67	
	Qadisiyah	20.33	-	1.33	*2.33	1.54
	Technological	19	-	-	1	
	Baghdad	18	-	-	-	

Value (T) spreadsheet (2.31) under the 0.05 level and at 8 degrees of freedom

Note in the table above the lack of differences between the centers converged like between (the first position and the second) Aubin (second and third place) or between the (third and fourth) while popping the differences in the centers at least convergence like (first and third) or (first and fourth) etc.

## **Conclusions and Recommendations Conclusions**

 There is a statistically significant relationship between indicators of physical structure under study and the ratio of the transmission efficiency of the skill players have teams of Iraqi universities.

- 2. There are statistically significant differences between women with some signs of physical structure (fluids, muscle) and achievement among teams players Iraqi universities.
- 3. There are statistically significant differences between some psychological skills (visualization, relaxation, anxiety, self-confidence, motivation) teams with players Iraqi universities.
- 4. Lack of statistically significant differences between women with signs (weight, fat, focus of attention) and achievement.

#### Recommendations

- 1. Emphasis on periodic measurement of the physical structure indicators for the players because of its importance in the movement and better performance of the players.
- Recommendation to maintain the players to be indicators of physical structure within normal limits and ideal for the athlete, and because of its important role and an actor in the performance.
- Mind trained in psychological skills training and the allocation of time within a training module for psychological training in general and the development of psychological skills are particularly special.

#### References

- 1. Ahmad, Khaleda Ibrahim , (modern concepts in sports psychology, Edition(1) : Baghdad, Library and Archives, 2010).
- 2. Driss Mona Taha; analytical study of the effectiveness of tactical defensive formations and its relationship with some kind of attack at club volleyball teams for women. Master Thesis, University of Baghdad / College of Physical Education for Girls 0.2008.
- 3. Samad Abdul Sattar Jabbar; Vsjuloggiot mental processes in sport, Edition (1), (Cairo, Dar thought for Printing and Publishing, 2000).
- 4. Anzi Saud bin marble; relationship between self-confidence and motivation for achievement among students who have excelled academically and ordinary: Published research, Saudi Arabia, Umm Al Qura University 0.2003.
- 5. Between Anita; integrated nutrition program for athletes. Translate Khalid Omari, Edition (1): 2004.
- Mazen Hassan Jassim; evaluate the effectiveness of the performance of the players and basketball teams relationship to the results of the matches: (Master Thesis, University of Baghdad / College of Physical Education.2001)
- 7. Hantoush Maaon Thanon; sports psychology, Edition (1):( Mosul, Dar ATF 0.1987).
- 8. Suhad Ibrahim Hamdan; study Mgarnantrbat physical structure and some physiological indicators for students of Faculty of Physical Education for Girls and Mixed: Master Thesis, University of Baghdad / College of Physical Education for Girls 0.2010.
- Khalil Ahmed Salah al-Din; Alpha waves as an indicator for the development of mental skills and the level of performance of some players at higher

- levels, published research, the scientific journal of Physical Education and Sports: Helwan University, Issue 50, Egypt, 2007.
- 10. Osama full salary; sports psychology Mufahimapplications, Edition (2): (Cairo, Dar Al Arab Thought 0.1997).
- 11. Radwan Mohamed Nasreddin: the reference in the physical measurements, (Cairo, Dar Al Arab Thought 0.1997).
- 12. Shimon Mohamed Larbi; emotional traits and their relationship to the concept of self-esteem of the athletes: Ph.D. thesis, Helwan University / Faculty of Physical Education for Boys, 1979.
- 13. Abdul Hussein Al-Anwar; compared to some of the anthropometric measurements and indicators of physical structure of women aged 30-39 years in the centers (Educational Karkh second, Hamra, Damascus, and the University of Edinburgh) and find a profile of Iraqi women: (doctoral thesis, Faculty of Physical Education for Girls University of Baghdad, 2010).
- 14. Mohammad Hassan Allawi; entrance in sports psychology, Edition (2): (Cairo, the center of the book for publication, 2003).
- 15. Mohammad Hassan Allawi; Encyclopedia of psychological tests for athletes, Edition (1): (Egypt, the center of the book for publication, 1989).
- 16. Alqum Suhad Abdul; measure some physiological variables to identify the concern of the situation and calm the psychological impact of the program in mitigation: (doctoral dissertation, University of Baghdad / College of Physical Education for Girls, 2007).
- 17. Gighton and Hall; reference in medical physiology. Hilali translation honest, Edition (9):( Lebanon, academically International House, 1997).
- 18. Lima. The human body; muscles and bones. Los Maussollos translation: (Lebanon, academically International, 2009).
- 19. Mohammed Sidky Noureddine; relationship between the direction of competitive and confidence sports feature and as a case with the football players, the scientific journal of Physical Education and Sports, Scientific Conference of the sport and the principles of the Olympic and accumulations and challenges, Helwan University / Faculty of Physical Education for Boys, 1994.
- Schmidt, R. A Motor control and learning. (2ed edition) chon paigh, 11)): Human Kinheities. In 1995
- 21. Soehnlek, Boody Comfort F5, 2009.