Structure Communication Skills scale for 4 x 100m relay contestants in the Receiving and Handling Area

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Introduction and research problem:

People's connection to each other is a natural behavior and a vital need required by the tendency of acquaintance and the necessities of living; During the transmission of information from a person or group to persons or groups using symbols of common meaning and one concept to the sender and the receiver.

And **Hamid Abdul Nabi al-Tay, Bashir Abbas Al Emlak (2009)** mentioned that That communication represents 99% of our ways of communicating with others at all levels to the extent that silence also represents a kind of effective communication that belongs to the language of the body, and that communication is important and vital in promoting the cultures of peoples and ensuring their advancement and continuity, every minute the world communicates and interconnects through contact with different types, and no life can continue without contact (14 : 13).

And Barbara F.Okun, Ricki E. Kantrowitz(2015)sees that Communication between individuals must be enjoyed skills for this communication, and the main problem for individuals is their lack of communication skills that help them to communicate their problems to others, so individuals must be trained to make sure that they have become part of them, many individuals believe that their communication skills are good, and when the individual begins to learn communication skills may discover that the skills he learns are completely different from his normal skills and behaviors, at first the individual may feel uncomfortable and frustrated, and it is easy to listen to clarify the communication skills but difficulty lies In applying these skills because their application requires exercises, repetition

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and training in different life situations(49 : 54).

And **Mohamed Hassan Allawy** (**2012**) mentioned that one of the most important tasks and duties of the players within the sports team is to get to know each player in the team all the team members, and provide positive support to team members, as should use effective means of communication with team mates honestly and open heart, and try to immediately remove any conflicts between colleagues in the team, and make the utmost effort for the benefit of the team at all times in addition to trying to listen to the opinions of colleagues in the team and accept their guidance(35 : 347).

Gahda Mohamed Abd-Alhamid (2000) Quoting **Terry Orlick (1986)** Refer to To that in order to succeed the sports team in achieving more achievements in sports competitions must realize the role played by the sports team as well as the roles played by his colleagues so that he can provide them with support to improve performance and thus achieve better results in the sports competition or at least avoid collision and conflict between roles within the sports

team group and this can only be done if the players realize and were aware of the use of effective communication skills between them while preparing to participate in the competitions Sports(28 : 156)(52 : 56).

And the relay races are the most fun and exciting races of the field and track and the most exciting of all because of the availability of factors of excitement, enthusiasm and excitement for the contestants and the public, and therefore placed as the last race to seal one of the days of the championship or conclude the whole championship, which is the only race of field and track competitions that depends on the team work, i.e. depends on the success of the team members in accomplishing this high technical and fruitful cooperation between the members of the team to gain advanced position during the race.

As the relay race is not a race of individuals but the race sticks without reaching the stick to the finish line cancels the race, as the philosophy of this race is not to decrease the speed of the stick in any stage of the 4×100 meters relay race especially in the stage of

delivery and delivery because the stick is prone to fall, and the stage of passing the stick is the most important in where it is three times if the speed of the stick is maintained constant or incremental, it positively affects the outcome of the race.

Zaki Mohamed Darwish and Adel Mahmoued abd-alhafez (**1997**) both are indicating to that stick is the only thing that completes the whole race and depends the success of any team on the speed of the course of the stick, and although the ability of the rider to run quickly has an impact on the result of the race but delivery and delivery has an effective role also, since it is easy to lose the stick speed easily as a result of any error, and although also the start has importance and impact on the outcome of the race, the start occurs once at the beginning of the race and depends on one rider on the course of the race, However, delivery and delivery occur three times as all the contestants are trained, so delivery and delivery is the most important and most influential on the outcome of the race(18 : 176).

Again **Bastawisi Ahmed Bastawisi** (**1997**) mentioned that That the digital level of the team 4×100 meters relay depends on a set of elements: the level of each rider in the team, the mastery of the team's process of passing the stick in the delivery area and delivery in the appropriate way and high efficiency and safely, exploiting the delivery area and receiving the optimum exploitation by selecting the appropriate point for receiving the stick and the possibility of completing the delivery process and receiving it, the optimal distribution of the four contestants in accordance with the requirements of each area of the race, the focus and calm on the part of each rider, thus the process of passing the stick in the delivery area and receiving the most important signs. The 4×100m relay team, where the arrival of the Muslim and the recipient to the highest possible speed and homogeneous the moment the stick is passed safely and without falling, thus the result of the 4×100 meters relay race depends primarily on the process of delivery and delivery so as to shorten the distance traveled do not create a large gap between the contestants in the distance of 100 meters but the greatest

effect in the process of delivery and delivery of the stick(9 : 69 , 82).

It has been noted that most of the Arab studies that dealt with the topic of communication in the field of sports dealt with it on the one hand is the contact between the coach and the players, or the communication between the teacher and the students in the study of sports education, or the communication between the leader and the subordinates (administrative communication) despite the diversity and multiplicity of types of communication in the field of sports.

Hassan Ahmed El-shasie, Ibrahim Mahmoued abd-elmaqsoud (**2003**) both of the mentioned that, Types of communication in the sports field include self-communication (what happens within the player), personal communication interpersonal communication (which takes place between one player and another), and communication mass (which is made between a player and a group of players brought together in one place)(13 : 213 , 214).

Ahmed Amin Fawzi, Tarek Mohammed Badr-eldine (**2001**) also points out that sports teams can be classified according to the type of communication between their members to teams where direct contact is made such as football, basketball, volleyball and hockey teams, and there are other teams where there are Indirect communication between its members, which are those teams whose members do not communicate directly dynamically despite their intellectual and emotional contact as individual games teams, and there is a third type of contact according to which some sports teams are classified as a pair of teams in terrestrial tennis Table tennis and relay teams in the sprint and swimming(3 :24 , 25).

The study of **Abdul Rahman Mahmoud Al Khayat (2012) (25) Jamal Abu Bishara (2013) (11)** and also The Study of **Laisk Domagoj Lausic (2015)(50)** found the importance of studying the communication skills of players during training and sports competitions in order to develop training programmes suitable for the development of their communication skills in order to improve the performance of players during training and sports competitions.

The process of transferring the stick from one rider to another are the biggest problems of the relay race, where this process must be done with the utmost speed and accuracy, and it requires the identification of the most important communication skills between the Muslim player and the player receiving the stick in the delivery and delivery area, which through its development works to prepare them to complete the process of delivery and delivery at maximum speed and without errors, as the development of communication skills between the Muslim player and the receiving player helps them to move in the right time by agreeing in advance on some words or signals or Gestures or symbols that can be won by their implementation.

And do not forget that the American team was greatly disappointed after the cancellation of the team result in the 100m relay race in the World Athletics Championships held in Beijing (2015), and the U.S. team was the most prominent candidate for the gold medal until a fatal mistake committed by young sprinter Mike Mike in the last 100 meters after receiving the stick from Tyson Jay Tyson after exceeding the line allowed for the delivery area and delivery of the stick, and despite finishing the race in the second place behind Jamaica, which achieved The first was led by Usain Bolt, but the judges cancelled out the Americans' lead on the pretext of crossing the delivery and delivery zone and the silver medal went to the Chinese dragon, while the Canadian team won the bronze medal(53).

Bastawisi Ahmed Bastawisi (**1997**) states that the 4x100m race is a sequence of group races, which depends on the unified work of the team members, and therefore must take some important considerations and planning skills that help the team to win, including the possibility of each Player for receiving and delivering the stick; The second and third must master both the delivery process and the delivery process(9 :79 , 80).

Ibrahim Salem Al-Skar and others (**1998**) states that through technical and dynamic analysis of the relay race he found that the most important technical and motor problems in the relays are limited to two main problems: the way the

stick moves from one player to another so that the stick does not collide with each other or the stick is exposed to fall from one of them during passing, and second: the transfer of the stick from one player to another and they are at maximum speed in the running so that there is no loss of speed may affect the disruption of the total time race(1 : 27).

sareh Abdul Karim al-Fadhli, Khawla Ibrahim Al-Mufaraji (**2012**) states that the team's victory in the 4x100m relay depends heavily technically on the speed of the movement of the stick, and therefore the speed of the delivery process and delivery because it is the most important stage in this race and affected by the result of the team, as the delay in it even a fraction of a second each time the stick moves from rider to teammate that will affect the final result of the race, and therefore the process of delivery and delivery and the extreme aggression of the rider must be carried out. Possible speed during the delivery and delivery area, receiving the stick in a proper manner leads to its continued movement and the rider is at the top of his speed(21 : 85).

So, the stick must be replaced as soon as possible and safely so as not to fall in the team to recover it and when the runner holding the stick approaches the recipient, he often calls on his colleague or gives him an agreed signal to extend his arm back to receive the stick, and the Muslim must choose the appropriate time to give the receipt signal to his colleague and be usually in the specified area before the end of the delivery area and delivery about about 4:3 m (meeting point) and the recipient is a distance from half to one meter of his colleague and so so not so A disruption occurs if the signal is given early or late as it should also be taken into account to give him the signal when the receiving hand arm reaches the end of the front weight, as it helps to receive the stick during the rear weightof the arm does not lead to a significant obstruction in the speed of the receiving player, as the Muslim must make sure that his colleague has captured the stick before leaving it so as not to fall, as the recipient must extend his arm back in the right position without any deviation And to continue to increase his speed while receiving the stick.

In order to avoid friction and collision between the contestants upon delivery and delivery while they are at maximum speed during the race, there must be understanding, harmony and effective exchange of verbal messages, signals and gestures between the Muslim and the recipient of the stick in the delivery and delivery area, in order to master this process, which boils down to the appropriate compatibility to extend the back and rotate the palm for the recipient, and for the Muslim rider must master the compatibility in extending the arm forward stick in the hands of his colleague correctly while extending the higher, the accuracy of the lower, must be The timing of the scrolling process between the contestants and compatibility in the call and response process, compatibility in understanding the distance and location of the rider for the colleague and determining the appropriate time for the call and receipt.

The researcher also noted by watching many races 4×100 meters relay at the local, international and Olympic level the failure of some of the racers in the process of handing over and receiving the stick, and that occurs because the fall of the stick to the ground at the moment of delivery and delivery, which leads to the disruption of the race for this team as a result of the capture of the stick again by the rider receiving the stick and this affects the time of the race, or the failure of the Muslim and the recipient to reach the maximum speed possible the moment the stick is passed and it also affects in the end on the total time of the race, or Failure to complete the process of delivery and delivery of the stick between the Muslim and the recipient within the delivery and delivery area specified by 20 meters and thus cancel the result of the race for this team, all of this occurs as a result of the wrong move or slow movement or lack of movement in the right time due to the lack of understanding and harmony between the contestants due to the poor communication skills between them and their inability to effectively exchange verbal messages, signals, gestures and symbols between them during the process of delivering and receiving the stick during the race.

Therefore, the researcher chose this study to learn about the most important communication skills between the racers of 4×100 meters relay in the delivery and delivery area and the most used during competitions and inventory so that the trainers are directed to build a kind of effective communication between these contestants using effective and feasible means that can be used in all situations and conditions during races.

Based on the foregoing, the importance of the current study is clear, which is the construction of the measure of communication skills between the contestants of 4×100 meters in the delivery area, where this study contributes to the identification of communication skills between the contestants of 4×100 meters in the area of delivery and delivery, and the impact of these skills on communication between them, which has an effective effect during the race in order to win this race and break the world and Olympic records.

The importance and need of research:

The theoretical importance of research

- Within the limits of the researcher's knowledge that it is one of the first studies in the Egyptian and Arab environment that is interested in Structure a measure of communication skills between the contestants 4×100 meters relay in the area of delivery and delivery.

- Know the contribution of the delivery and delivery stage in the 4×100 meter relay race.

- Educate the trainers and relay players on the importance of communication skills between the racers of 4×100 meters relay in the area of delivery and delivery during competitions, which have the effective effect in order not to decrease the speed of the stick at any stage of the 4×100 meters relay race, especially in the stage of delivery and delivery because the stick in it is prone to fall i.e. keeping the speed of the stick steady or incremental, where it positively affects the outcome of the race.

The applied importance of research:

- This study helps in identifying the communication skills between the contestants of 4×100 meters relay in the delivery area, by Structure a scale that can benefit the trainers of relay competitions

in identifying communication skills and motor interactions that take place between the contestants of 4×100 meters relay in the delivery area during the competitions .

- Provide a measure that monitors the communication skills between the contestants of 4×100 meters relay in the area of delivery and delivery during the competitions, and thus come up with some recommendations, which urge the development of practical guidance programs with the aim of developing communication skills between the contestants of 4×100 meters relay in the area of delivery and delivery during competitions, while the Arab environment is devoid of a measure that measures such skills for relay racers.

Objevtive of research:
The research aims to build a communication skills scale for 4×100 m relay racers in the delivery and delivery area.

ReSearch question:
What are the communication skills between the 4×100m relay racers in the delivery area?

Search terms:

Skills:* Communication
It's to take the best means of conveying and receiving information, meanings, ideas, concepts, feelings and opinions with another player or group of players and influence their convictions of what he wants, whether verbal or non-verbal, using words, signs, symbols, gestures or emotional emotional expressions.

Area of Receiving and Handling:
It is a specific area of 20 meters long located in the middle of the end line of distance for the first player and the starting line of the distance of the next player in which the relay stick is delivered and received, as preceded by ten meters called the area of increasing speed in which the Area of Receiving and Handling is not allowed(24 : 4)(30 : 90).

Relay race 4x100m:*
It is one of the track races that requires great individual effort as well as collective work the race is led by a team of four players each who cuts a specific distance in which he carries a short stick conveyed to the next player hand in hand within a specific area of 20 meters in addition to 10 meters increased speed in which to prevent receiving the stick.

Reference studies:

Table(1)
Reference studies

N	Resercher name	Title of the study	Type of study	Most important objectives of the study	Study procedures		Important conclusions
					sample	Method	
1	Ali Noman Trad)2014()26(	The effect of the small game method in improving the most important physical and motor abilities and learning students the effectiveness of the enemy 4×100 meters relay	Master	- Learn about the effect of small games in improving physical and motor abilities in pupils aged 11 to 12. - Learn about the effect of the small gaming method in improving the technical performance of a 4×100m relay enemy in students from 11 to 12 years old.	90 Students	Experimental	- The style of small games has a positive effect in improving the physical and motor abilities of students from 11 to 12 years of age. - Small games that are diverse and similar to performance have a positive effect in learning the 4×100m enemy competition, especially the delivery and delivery stage. - The small games designed by the researcher contributed to the creation of a dynamic motivation for the students helped to learn and master the stage of Receiving and Handling..
2	Mohammed Al Sayed Shaaban)2015()32(	The effect of some harmonic and skill training on delivery time for the 4x100m relay race	Master	- Identify some of the harmonic capabilities of the delivery and delivery skills. - Develop a training program to develop some of the compatibility and skill capabilities of the delivery and delivery skills.	Runner 12	Experimental	- The most important compatibility capabilities of the 4x100m relay race are: reaction- movement binding - perception of a sense of movement - dynamic balance - accuracy - compatibility. - The proposed training program using harmonic and skill training has a positive impact on improving the digital level of the 4x100m relay..
3	Domagoj Lausic Et all)2015()50(	Non-verbal communication, verbal communication and team coordination in doubles tennis	Scientific production	- Identify verbal communication in sports teams as it relates to the effectiveness of non-verbal communication and competitive performance. - Learn about the relationship between verbal and non-verbal communication and what happens during matches between tennis players.	44 players	Descriptive	- Winning players showed higher levels of verbal communication and had a tendency to score higher in non-verbal communication elements. - Winning teams have repeatedly used emotional and cheerleading phrases. - The more consistent the communication patterns within the winning teams, the more responsive the players to the non-verbal signals, which may enhance communication and game planning for these teams.
4	Nahala Mohammed Awad) 2016()46(	The effectiveness of a behavioral guidance program in the development of communication skills for students of Prince Sattam Bin Abdulaziz University	Scientific production	- Learn about the effectiveness of a behavioral guidance program in developing communication skills for university students. - To know the effectiveness of the program on the level of communication skills for students according to the sex variable - the level of study. - Structure a measure of communication skills for university students.	145 Students	Experimental	-The effectiveness of the behavioral psychological guidance program in the development of communication skills in females more than males. - The effectiveness of the program in developing communication skills for students in the fourth academic year more than the first academic year. - The 5-skill communication skills scale for university students is built: effective listening, speaking and persuasion, the ability to understand others, empathy and expression of feelings feedback.

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Reference studies

N	Resercher name	Title of the study	Type of study	Most important objectives of the study	Study procedures		Important conclusions
					sample	Method	
5	Eman Najmuddin Abbas, Sheno Zahir Hakim)2018)(8(	The impact of some vision exercises on special visual capabilities and spatial and temporal parameters for delivery and delivery and the level of achievement in the 4×100m relay race	Scientific production	- To identify the impact of some vision exercises on special visual abilities and spatial and temporal parameters for delivery and delivery and the level of achievement in the 4×100m relay race.	8 Contestants	Experimental	- Vision training has led to the development of visual abilities for 4×100 m relay racers. - The emergence of a clear development in the spatial and temporal field of the point of Receiving and Handling, which indicated the effectiveness of the exercises used in recognizing the appropriate place for delivery and delivery and in order to serve the non-decrease of speed among the contestants. - Vision training has positively affected the achievement level of the 4x100m relay racers.

Comment on reference studies and the extent to which they are utilized:

Within the limits of the researcher's knowladge and through the study of reference studies the researcher did not reach any study concerned with Structure a measure of communication skills between the contestants 4×100 meters relay in the area of delivery and delivery, and this is an advantage for the current study of reference studies reached, where reached 5 reference studies between scientific production and master (Arab-foreign) including 3 studies for the 4x100m relay race and 2 studies on communication and skills, and these studies were conducted during the period from 2014 to 2018, and These studies varied and varied in their objectives, ranging from Structure a measure of communication skills among university students to identifying the differences between university students in possessing communication skills according to the type of social-specialization study, other studies aimed at Structure the measure of communication for the players of collective games, and other studies aimed at identifying the impact of the use of a guidance program on the level of communication of handball players, and other studies aimed at identifying the most common means of communication between players and identifying the

degree of communication commonly different forms of communication between the players and the common already. To identify the differences in the quality of communication according to different play positions, and other studies aimed at identifying the effect of the style of small games in improving the physical and motor abilities and the technical performance of the 4×100 m relay, and other studies aimed at identifying some of the compatibility abilities of the delivery and delivery skills of the 4×100m relay race, while other studies aimed at identifying the relationship between verbal and non-verbal communication and what happens during matches between the tennis players of the pair, and other vision studies aimed at identifying the effect of some of the impact on some of the impact of some of the exercises On special visual capabilities, spatial and temporal parameters for delivery, delivery and level of achievement in the 4x100m relay race.

The scientific research methods used varied according to their suitability for the nature of each study, where some studies used the descriptive method while others used the experimental approach, as varied methods of sample selection between random and random, and the samples included a group of players and a group of other university students and school children in different sports, and the means of collecting data used in these studies varied according to the nature and purpose of each study, and the differences in these studies were noted and the researcher returns these differences in these studies. From tests and metrics to measure these variables, and from the results of those studies was the Structure of the measure of communication skills for university students, which is of 4 skills: speaking and convincing - the art of dealing with others - good listening - managing emotions, having statistically significant differences in the communication skills of university students according to the social type in both the overall degree of the scale and the ability to listen to the management of emotions, and the Structure of the communication measure for the

players of the group games was based on vigilance and understanding, the ability to organize the competitive climate, the ability to send signals, The ability to arrange goals, progress in the communication process, as all players regardless of their positions on the field tend to use similar forms of communication in different play positions, the winning players showed higher levels of verbal communication and had a tendency to score higher in non-verbal communication elements, and the winning teams repeatedly used emotional and cheerleading phrases, and the more homogenous the communication patterns within the winning teams, the more consistent the players in these teams are the more responsive to non-verbal signals which may enhance communication. The game planning for these teams was also built as a 5-skill communication skills measure for university students: effective listening, speaking and persuasion, the ability to understand others, empathy and expression of feelings, and feedback.

Despite the agreement and difference between these studies, they benefited the researcher in determining the general framework of the study as well as the research procedures by identifying the problem of current research and the formulation of the goal and the question of research and the identification of the method used and the selection of the most appropriate statistical methods that are consistent with the goal of the research, as the researcher relied on the findings of these studies as a basic basis for the research treatment of current research.

ReSearch procedures:
Research methodology

The researcher used the descriptive method (survey method), in order to suit the nature and purpose of the search by describing and analyzing what an object and extracting facts from it.

Research Community

The research community included 4x100m relay runners who are registered in the Records of the Egyptian Athletics Federation(2019/2020).

Sample Research

The research sample included 81 contestants from 4x100m relay contestants and those enrolled in the records of

the Egyptian Athletics Federation season (2019/2020), deliberately selected from the research community with the aim of extracting scientific transactions (honesty - stability) for the communication skills scale, and the following table shows the numerical and statistical description of the research sample.

Table (2)
Numerical and statistical description of the research sample (n=81)

N	Club		
	Club Name	**Level**	**Number of players**
1	Al-Ahly club	Premier Division	5
2	Zamalek Club	Premier Division	6
3	Tala'ea El Gaish	Premier Division	6
4	El Shams SC	Premier Division	4
5	Sporting Club	U20	5
6	El Mansoura SC	U20	6
7	Al Ittihad Alexandria Club	Premier Division	5
8	Olympic Club SC	U20	4
9	Maadi Sports and Yacht Club	U20	5
10	Nasr City Sporting Club	U20	4
11	6th October Sporting Club	U20	6
12	El Zohour Sporting Club	U20	4
13	Al Nasr SC	U20	4
14	Heliopolis Sporting Club	Premier Division	5
15	Kafr El-Shaikh Sports Club	Premier Division	6
16	Smouha SC	Premier Division	6
Total	16	——	81

Reasons for selecting a search sample:

- All members of the sample are registered players of the

Egyptian Athletics Egyptian Association(2019/2020).

-Understanding and responding to the nature of the research by all members of the sample.

- The willingness and desire of all contestants to participate in the search.

- The approval of the trainers of these clubs to apply the search tool to the contestants.

‒ The cooperation of the officials of these clubs and team officials with the researcher and facilitate the task of conducting the research.

‒ The presence of students and graduates from the Faculty of Physical Education Mansoura University play ing and working in these clubs, and then help the researcher to apply the research tool.

‒ The availability of fellow assistants within these clubs to assist the researcher in the measurements related to the research sample and their understanding of the nature of the procedure sought.

Data collection tools:

From the past the results of the theoretical readings and reference studies, and in accordance with the requirements of the research, the researcher used the following:

Scale of communication skills for 4×100m relay racers in the Area of Receiving and Handling: (preparation/ researcher) Scale construction steps:

Identify the communication skills between 4×100 m relay racers in the Area of Receiving and Handling:

The researcher defined the communication skills between the 4×100 meters relay racers in the Area of Receiving and Handling of a procedural definition based on the statements of **Amal Abdul-Samaya Baza** (**2003**) (**7**), **Radwa Suleiman Al Hamidat** (**2007**) (17), **Hanan Mohammed Fawzi** (**2010**) (15), **Barbara F.Okun kantrowitz Ricki, E** (**2015**) (**49**), and **Nahala Mohammed Awad** (**2016**) (**46**), in proportion to the planned trends and movements of players that often occur in competitive training situations by being : A set of abilities used by one or more contestants with the aim of transmitting the planning information on the moves and

how to deliver and deliver the relay stick between the racers during the race through some pre-agreed words, signs, gestures or symbols, through which they can win the race.

Set the target of the scale:

The 4×100m relay skills scale in the Area of Receiving and Handling aims to identify the communication skills between the 4×100m relay racers in the delivery and delivery area, and to identify the positive and negative aspects of the communication process among the contestants during the race, to meet the following conditions:

−   The scale must express the connection as a positive and performance-friendly situation during the race between the 4×100 m relay racers in in the Area of Receiving and Handling.

−   The scale must reflect the definition of communication and the definition of its different skills.

−   The scale must address the characteristics and nature of performance of the 4×100 m relay racers in the delivery and delivery area taking into account the changing and successive positions and movements during the race.

−   The scale must be comprehensive.

To set the communication skills between the contestants of 4×100 meters relay in the Area of Receiving and Handling, the researcher conducted a reference survey of scientific references and previous studies after reviewing many psychological measures used in measuring communication in the field of sports, such as (4) (34) (33) (6) (51) (31) (17) (19) (38) (43) (41) (11) (23) (46).

The reference survey carried out by the researcher showed 28 communication skills in general, which are reflected in the table(3).

Set the skills of the scale:

Table(3)
Communication Skills Reference Survey

N	Rerearcher name	Title of the study	Type of study	Most important objectives of the study	Study procedures		Important conclusions
					Sample	Method	
1	Ali Noman Trad (26)(2014)	The effect of the small game method in improving the most important physical and motor abilities and learning students the effectiveness of the enemy 4×100 meters relay	Master	- Learn about the effect of small games in improving physical and motor abilities in pupils aged 11 to 12. - Learn about the effect of the small gaming method in improving the technical performance of a 4×100m relay enemy in students from 11 to 12 years old.	90 Sudents	Experimental	- The style of small games has a positive effect in improving the physical and motor abilities of students from 11 to 12 years of age. - Small games that are diverse and similar to performance have a positive effect in learning the 4×100m enemy competition, especially the delivery and delivery stage. - The small games designed by the researcher contributed to the creation of a dynamic motivation for the students helped to learn and master the stage of Receiving and Handling..
2	Mohammed Al Sayed Shaaban (32)(2015)	The effect of some harmonic and skill training on delivery time for the 4x100m relay race	Master	- Identify some of the harmonic capabilities of the delivery and delivery skills. - Develop a training program to develop some of the compatibility and skill capabilities of the delivery and delivery skills.	12 Runner	Experimental	- The most important compatibility capabilities of the 4x100m relay race are: reaction- movement binding - perception of a sense of movement - dynamic balance - accuracy - compatibility. - The proposed training program using harmonic and skill training has a positive impact on improving the digital level of the 4x100m relay..
3	Et allDomagoj Lausic (50)(2015)	Non-verbal communication, verbal communication and team coordination in doubles tennis	Scientific production	- Identify verbal communication in sports teams as it relates to the effectiveness of non-verbal communication and competitive performance. - Learn about the relationship between verbal and non-verbal communication and what happens during matches between tennis players.	44 players	Descriptive	- Winning players showed higher levels of verbal communication and had a tendency to score higher in non-verbal communication elements. - Winning teams have repeatedly used emotional and cheerleading phrases. - The more consistent the communication patterns within the winning teams, the more responsive the players to the non-verbal signals, which may enhance communication and game planning for these teams.

Follow Table(3)
Communication Skills Reference Survey

N	Reser cher name	Title of the study	Type of study	Most important objectives of the study	Study procedures		Important conclusions
4	Nahala Mohammed (46)(2016) Awad	The effectiveness of a behavioral guidance program in the development of communication skills for students of Prince Sattam Bin Abdulaziz University	Scientific production	- Learn about the effectiveness of a behavioral guidance program in developing communication skills for university students. - To know the effectiveness of the program on the level of communication skills for students according to the sex variable - the level of study. - Structure a measure of communication skills for university students.	145 Students	Experimental	-The effectiveness of the behavioral psychological guidance program in the development of communication skills in females more than males. - The effectiveness of the program in developing communication skills for students in the fourth academic year more than the first academic year. - The 5-skill communication skills scale for university students is built: effective listening, speaking and persuasion, the ability to understand others, empathy and expression of feelings feedback.
5	Eman Najmuddin Abbas, Sheno Zahir (8)(2018)Hakim	The impact of some vision exercises on special visual capabilities and spatial and temporal parameters for delivery and delivery and the level of achievement in the 4×100m relay race	Scientific production	- To identify the impact of some vision exercises on special visual abilities and spatial and temporal parameters for delivery and delivery and the level of achievement in the 4×100m relay race.	8 Contestants	Experimental	- Vision training has led to the development of visual abilities for 4×100 m relay racers. - The emergence of a clear development in the spatial and temporal field of the point of Receiving and Handling, which indicated the effectiveness of the exercises used in recognizing the appropriate place for delivery and delivery and in order to serve the non-decrease of speed among the contestants. - Vision training has positively affected the achievement level of the 4x100m relay racers.

The percentage of the reference agreement varied considerably and their ranking was as follows with a table (4).

Table (4)
Number of repetitions and percentage of communication skills
according to reference survey (n=25)

Order	Skils	Repetition	Percentage
1	Good listening	16	%64
2	Speaking and persuasion	14	%56
3	Using body language	14	%56
4	Emotional response	12	%48
5	Effective listening	11	%44
6	Positive handling	11	%44
7	Vocal tone	11	%44
8	Attendance and vigilance	10	%40
9	Performance Directions	10	%40
10	Perception of the role	9	%36
11	deliver information	9	%36
12	Emotional control	9	%36
13	prediction	8	%32
14	Thinking	8	%32
15	art of dealing with others	8	%32
16	Stability of behavior	7	%28
17	Trust and appreciation	6	%24
18	Ask questions	5	%20
19	Behavior reward	4	%16
20	Tactile behavior	4	%16
21	Observation behavior	3	%12
22	Feedback	3	%12
23	Dialog	3	%12
24	Reading	2	%8
25	Writing	2	%8
26	Negotiating	1	%4
27	Managing emotions	1	%4
28	Personal appearance	1	%4

then the researcher presented the communication skills to a group of masters of the judges, all of whom have a professor-facility (1) degree to see the appropriateness of the communication skills of the 4×100 meters relay racers during the race, and the reference survey carried out by the researcher for the survey form of the arbitrators to ascertain the extent of their suitability to measure the communication skills between the contestants 4×100 meters relay - annex (2) The following table explains the arbitrators' views on communication skills.

Table (5)
Arbitrators' opinion on communication skills (n=13)

By studying the table (5) it shows that the ratio of the agreement of the arbitrators to communication skills was arranged as follows Table (6).

Table (6)
Number of repetitions and percentage of communication skills according to the opinions of arbitrators   (n=13)

Order	Skills	Repetitions	Percentage
1	Effective listening	13	100%
2	Attendance and vigilance	12	92%
3	prediction	11	84%
4	Role Perception	11	84%
5	Positive handling	11	84%
6	Delivery of information	11	84%
7	Using body language	11	84%
8	Speaking and persuasion	10	76%
9	Emotional response	10	76%
10	Good listening	5	38%
11	Emotional control	4	30%
12	Trust and appreciation	3	23%
13	Behavior Stability	3	23%
14	Tactile behavior	3	23%
15	Personal appearance	3	23%
16	Writing	3	23%
17	Thinking	3	23%
18	Observation behavior	2	15%
19	art of dealing with others	2	15%
20	Performance trends	2	15%
21	Ask questions	2	15%
22	Feedback	2	15%
23	Behavior reward	2	15%
24	Vocal Tone	2	15%
25	Dialogue	2	15%
26	Negotiation	2	15%
27	Emotion Management	2	15%
28	Reading	2	15%

The study of table (6) shows: The arbitrators agreed on 9 communication skills, which are respectively:

Effective listening, attendance, vigilance, expectation, role recognition, positive handling, information delivery, body language use, speech and persuasion, emotional response, the researcher has been satisfied with 70% and more to accept skill, and the rest of the skills have been excluded.

In order to determine the relative importance of each skill, the researcher calculated the arithmetic average of both

the percentage of communication skills according to the reference survey and the percentage of approval of communication skills by the arbitrators. Thus, there are two libraries to calculate the relative importance of each skill and become more objective, and the researcher calculated the relative importance of the following law to calculate communication skills

Relative importance of skill =

$$\frac{\text{percentage of skill according to reference survey} + \text{percentage of skill according to the opinions of arbitrators}}{2}$$

(12:63) (40:283-288)

Below is a table (7) showing the relative

importance of communication skills

Table (7)
Relative importance of communication skills

N	Skills	Percentage		The relative importance of % skill
		According to the reference survey	According to the opinions of the arbitrators	
1.	Effective Listening	44%	100%	72%
2.	Using body language	56%	84%	70%
3.	Attendance and vigilance	40%	92%	66%
4.	Speaking and persuasion	56%	76%	66%
5.	Positive handling	44%	84%	64%
6.	Emotional response	48%	76%	62%
7.	Role Perception	36%	84%	60%
8.	Delivery of information	36%	84%	60%
9.	prediction	32%	84%	58%

By studying the table (7) shows the relative importance

of communication skills, which extended from 58% to 72%,

the skill of effective listening came in first place with a percentage of 72%, and the skill of expectation in the last place came in percentage of 58%.

Set the metric term:

After identifying the skills of the scale and its relative importance, the researcher formulated a set of suggested phrases to measure each communication skill and based on the precise definition of each skill and its importance to the 4×100 meters relay racers during the race, as well as guided by many psychological metrics in the field of general psychology and sports psychology such as (4) (34) (33) (6) (51) (31) (17) (19) (38) (43) (41) (11) (23) (46).

The researcher was keen on to take accuracy in the formulation of the phrases so that they are clear and understandable and familiar to all contestants and as short as possible, as well as taking into account the connection between the phrases with the same content, and do not suggest the words of the type of response, and the exclusion of the phrases repeated in the content of those skills, as the researcher took into account in the formulation of the phrases appropriate procedural definition of each of the nine communication skills, the extent to which the phrases belong to each communication skill, and the ease and clarity of meaning in accordance with the nature of the current sample.

Thus, the researcher developed 189 words, including 154 positive words and 35 negative words, and this diversification of the terms between positive and negative is necessary so that the answers of the players are not at the same pace, as well as to ensure that their motivation is triggered to answer, and the proportion of the number of phrases proposed to measure each skill with its relative importance – annexed(3).

The following table shows the total number of positive and negative statements proposed for the communication skills scale between the 4×100m relay racers in the Receiving and Handling area.

Table (8)
Total suggested positive and negative statements of
communication skills scale

N	Communication skills	Number of suggested phrases		Total phrases
		postive	Negative	
1.	Effective listening	21	8	29
2.	Using body language	24	2	26
3.	Attendance and vigilance	21	2	23
4.	Speaking and persuasion	22	1	23
5.	Positive handling	17	4	21
6.	Emotional response	6	12	18
7.	Role Perception	13	4	17
8.	Delivery of information	16	1	17
9.	prediction	14	1	15
Total		154	35	189

The communication skills gauge between the 4×100 m racers in the delivery area in its initial form:

After the researcher developed the proposed phrases to measure the communication skills between the contestants of 4×100 meters relay in the delivery and delivery area, which numbered 189 words distributed on communication skills in numbers commensurate with the relative importance of each skill, as described in the previous table No. (7), the researcher presented them to the arbitrators - annex (3) - and after the presentation to the gentlemen of the arbitrators was reached:

- Agreement on 93 words of scale after linguistic ally by the arbitrators.
- Add 3 new phrases as shown in Table (9).
- Delete 96 of the scale phrases and their numbers as shown in Table (10).

Table (9)
Phrases added to communication skills according to the opinions of the arbitrators

Skill	Phrases added
Effective listening	I understand my colleague's signals before he reaches the starting point and turn them into movements to deliver and deliver the relay stick quickly and correctly.
Delivery of information	I use the terms and phrases agreed with my colleague to perform the skill of delivering and delivering the relay stick successfully and quickly.
prediction	I can accurately expect the right place and time to deliver and deliver the relay stick between me and my colleague during the race.

Table (10)
Numbers of phrases deleted based on presentation to arbitrators

Skill	Phrases numbers
Effective listening	3-5-6-7-8-9-12-15-17-18-19-21-23-25-26-29
Using body language	1-2-3-5-6-9-10-12-15-17-18-20-21-23-24
Attendance and vigilance	2-3-4-6-9-11-13-14-15-17-19-21-22
Speaking and persuasion	8-13-16-17-18-20-21-22
Positive handling	1-4-10-12-13-14-15-16-17-19-20-21
Emotional response	2-3-4-5-8-9-11-16
Role Perception	2-4-8-13-16-17
Delivery of information	1-3-5-9-10-13-14-15-16-17
prediction	3-4-7-8-9-10-14-15

The scale of communication skills between 4 x 100 m contestants follows in the Receiving and Handling zone in its second image:

After the researcher had presented the words of the scale to the arbitrators, he found that the number of words of the scale had become 96 - annex (4) - and the researcher had reformulated and re-presented these words to the masters of the arbitrator again. The percentage of agreement by the members of the arbitrator on the words of the scale was 100% prior to his or her psychometric transactions.

Then the researcher prepared the cover page of the scale, which included all the general data about the rider with emphasis on the confidentiality of these data, as well as his definition of the goal of the scale, and emphasized the need to read the phrases accurately and carefully and choose the answers that suit his true feeling and not what it should be, and thus the scale in its second form became ready to be applied to the research sample to calculate his sekometric transactions – annex (5).

The semetric transactions of the communication skills scale between the 4×100 m racers in the of Receiving and Handling area:
Validity:
True internal consistency:

The researcher calculated the sincerity of the physical composition using the method of internal consistency and verified the extent of the representation and

appropriateness of the statements of the scale, and the extent to which the degree of each phrase relates to the total degree of its skill, as well as each phrase and the total score of the scale, and the extent to which the grades of the metric skills are related to each other and the total score of the scale, on the sample of the research, which included (81) contestants of 4×100 meters of sequence selected deliberately from clubs (Al-Ahly- EL- Zamalek - Tala'ea El Gaish - El Shams SC - Sporting Club - Mansoura Sports Stadium - Al Ittihad Alexandria Club - Egyptian Olympic Club - Maadi Sports and Yacht - Nasr City Sporting Club – 6th octobr sporting club - El Zohour Sporting Club - El-Nasr Sporting Club - Heliopolis Sporting Club - Kafr El-Shaikh Sports Club - Smouha SC) and was implemented during the period between 12/1/2020 until 23/1/2020.

Table (11)
Matrix of interfaces between phrases and the total degree of skill and measure (n=81)

Phrase	Skill	Scale	Phrase	Skill	Scale	Phrase	Skill	Scale	Phrase	Skill	Scale
Effective listening			**Using body language**			**Presence and vigilance**			**Speaking and persuasion**		
1	0.680*	0.557*	2	0.662*	0.583*	3	0.640*	0.514*	4	0.624*	0.544*
10	0.797*	0.662*	11	0.743*	0.669*	12	0.676*	0.507*	13	0.627*	0.587*
15	0.539*	0.616*	28	0.543*	0.453*	24	0.727*	0.604*	16	0.787*	0.642*
19	0.735*	0.572*	33	0.432*	0.347*	35	0.544*	0.462*	22	0.481*	0.303*
21	0.578*	0.678*	43	0.577*	0.467*	47	0.801*	0.685*	29	0.509*	0.435*
27	0.865*	0.661*	50	0.653*	0.527*	54	0.144	0.077	34	0.806*	0.760*
32	0.370*	0.319*	72	0.119	0.090	61	0.640*	0.579*	38	0.627*	0.553*
37	0.127	0.11	80	0.872*	0.775*	76	0.790*	0.689*	44	0.538*	0.464*
42	0.765*	0.699*	84	0.710*	0.693*	91	0.759*	0.623*	52	0.128	0.111
51	0.592*	0.432*	88	0.628*	0.544*	96	0.603*	0.582*	56	0.639*	0.565*
58	0.624*	0.682*	95	0.731*	0.537*	**Role Perception**			62	0.777*	0.703*
65	0.462*	0.553*	**Emotional Response**			7	0.696*	0.531*	68	0.472*	0.382*
79	0.205	0.108	6	0.579*	0.405*	18	0.592*	0.441*	73	0.638*	0.564*
94	0.683*	0.764*	17	0.634*	0.574*	26	0.714*	0.611*	81	0.135	0.088
Positive handling			39	0.744*	0.665*	31	0.630*	0.543*	86	0.463*	0.389*
5	0.661*	0.527*	48	0.477*	0.381*	46	0.771*	0.556*	**Delivery of information**		
14	0.588*	0.435*	55	0.760*	0.629*	71	0.139	0.076	8	0.699*	0.625*
30	0.643*	0.477*	63	0.682*	0.531*	75	0.561*	0.506*	20	0.619*	0.545*
36	0.535*	0.464*	70	0.538*	0.426*	83	0.642*	0.589*	25	0.677*	0.603*
40	0.817*	0.759*	82	0.798*	0.612*	85	0.783*	0.655*	41	0.621*	0.547*
60	0.398*	0.368*	87	0.524*	0.446*	89	0.645*	0.518*	49	0.146	0.079
67	0.742*	0.731*	93	0.600*	0.534*	92	0.625*	0.560*	57	0.913*	0.839*
78	0.537*	0.420*	**Prediction**						64	0.556*	0.512*
90	0.644*	0.592*	9	0.563*	0.421*	59	0.596*	0.511*	69	0.709*	0.637*
			23	0.449*	0.349*	66	0.663*	0.621*			
			45	0.726*	0.658*	74	0.740*	0.627*			
			53	0.443*	0.362*	77	0.542*	0.495*			

*The scheduled (R) value at the indication level (0.05)=(0.220)

By studying table (11): shows a statistically significant correlation between the phrases, the overall degree of skills and the overall score of the scale: (37-49-52-54-71-72-79-81) and the overall degree of skills and the overall degree of the scale: Since the calculated (t) value is below its scheduled value at a moral level (0.05), which indicates the insincerity of these terms, the researcher has excluded these terms from the scale.

Table (12)
Matrix between skills and each other and the overall score of the scale(n=81)

N	Skills	Effective listening	Body language	Presence and vigilance	Speaking and persuasion	Positive handling	Emotional response	Role Perception	Delivery of information	prediction	Total degree
1.	Effective listening		0.569*	0.668*	0.886*	0.756*	0.663*	0.680*	0.558*	0.658*	0.576*
2.	Using body language			0.597*	0.719*	0.557*	0.626*	0.639*	0.712*	0.747*	0.510*
3.	Presence and vigilance				0.563*	0.619*	0.534*	0.594*	0.652*	0.524*	0.528*
4.	Speaking and persuasion					0.706*	0.641*	0.724*	0.598*	0.621*	0.625*
5.	Positive handling						0.581*	0.467*	0.718*	0.546*	0.581*
6.	Emotional response							0.680*	0.624*	0.712*	0.626*
7.	Role Perception								0.497*	0.816*	0.552*
8.	Delivery of information									0.576*	0.716*
9.	prediction										0.634*
10.	Total degree										

*The scheduled (R) value at the indication level (0.05)=(0.220)

By studying a table (12) it is shown that there is a statistical correlation between communication skills and each other and between the skills and the overall score of the scale, the calculated (R) value is greater than its scheduled value at a moral level (0.05), indicating an in-house consistency between communication skills, these skills and the overall degree of the scale.

Terminal comparison validated:

The researcher used this type of truthfulness in agreement with what was indicated **by Mohammad Hassan Allawi and Mohammad NasrEl-din Radwan (1988)** that the ability of the scale to distinguish between those with high ability

and those with low ability in a feature or characteristic of the important evidence that can indicate the truthfulness Scale, and the greater this ability, the greater the degree of validity of the scale(36 : 303).

The researcher arranged the individuals of the research sample in descending order in terms of the total score of the scale, at a rate of 27% of the total number of the total sample (81), meaning that the highest quadrant is 22 contestants and the lowest quadrant is 22 contestants, then the researcher found the arithmetic mean and standard deviation of the upper and fourth quartiles The lowest and then finding the difference between the average of the two quarters, and the scale was applied to the research sample, which was deliberately chosen from clubs (Al-Ahly- EL-Zamalek - Tala'ea El Gaish - El Shams SC - Sporting Club - Mansoura Sports Stadium - Al Ittihad Alexandria Club - Egyptian Olympic Club - Maadi Sports and Yacht - Nasr City Sporting Club – 6th octobr sporting club - El Zohour Sporting Club - El-Nasr Sporting Club - Heliopolis Sporting Club - Kafr El-Shaikh Sports Club - Smouha SC) during the period between 12/1/2020 until 23/1/2020.

Table (13)
validity of the peripheral comparison for the scale of communication skills (n=81)

N	Skills	Upper Quadrant (N=22)		Minimum Quadrant (N=22)		difference between the averages	Value "T"
		Arithmetic mean	Standard deviation	Arithmetic mean	Standard deviation		
1.	Effective listening	62.818	0.588	55.455	1.471	-7.363	21.797*
2.	Using body language	42.364	2.060	30.273	0.883	-12.091	25.307*
3.	Presence and vigilance	44.000	0.023	37.364	1.177	-6.636	26.447*
4.	Speaking and persuasion	47.455	1.765	34.636	2.060	-12.819	22.163*
5.	Positive handling	43.727	1.279	35.273	0.883	-8.454	25.515*
6.	Emotional response	42.864	0.640	27.182	0.588	-15.682	84.628*
7.	Role Perception	48.364	6.623	37.727	2.354	-10.637	7.098*
8.	Delivery of information	32.955	0.213	30.000	0.014	-2.955	65.000*
9.	prediction	36.000	0.016	30.455	1.471	-5.545	17.679*
10.	Total degree	400.547	9.405	318.365	10.887	-82.182	26.793*

*The scheduled (T) value at the indication level (0.05)=(2.021)

By studying a table (13) it is shown that there are statistically significant differences between the upper and lower quadrants in the communication skills scale for the 4×100m consecutive racers and the overall score of the scale, as the calculated (T) value is greater than its scheduled value at a moral level (0.05), indicating the sincerity of the scale.

Reliability:

Half-retail stability:

The researcher calculated the coefficient of stability of the scale in a half-segmentation method, which depends on the fragmentation of the scale in two equal halves by using individual phrases as opposed to matrimonial terms, and the researcher also used the half-segmentation method of Sberman Brown and the Dataman Stability Coefficient and alpha kronbach equation on the research sample, which included (81) players were deliberately selected from clubs (Al-Ahly- EL-Zamalek - Tala'ea El Gaish - El Shams SC - Sporting Club - Mansoura Sports Stadium - Al Ittihad Alexandria Club - Egyptian Olympic Club - Maadi Sports and Yacht - Nasr City Sporting Club – 6th octobr sporting club - El Zohour Sporting Club - El-Nasr Sporting Club - Heliopolis Sporting Club - Kafr El-Shaikh Sports Club - Smouha SC) and was implemented during the period between 12/1/2020 until 23/1/2020.

Table (14)
Calculation of the meter's stability coefficient (N=81)

N	Skills	Odd phrases		Even phrases		Split-Half	Spearman Brown	Tbbat guthman	Cronbach's alpha
		A	±B	A	±B				
1.	Effective listening	30.000	0.707	27.765	2.282	0.651	0.789	0.756	0.905
2.	Using body language	18.000	2.828	17.469	2.308	0.654	0.791	0.768	0.895
3.	Presence and vigilance	21.506	1.119	18.025	1.884	0.682	0.811	0.785	0.911
4.	Speaking and persuasion	21.247	1.786	18.000	3.240	0.614	0.761	0.754	0.912
5.	Positive handling	20.543	2.214	18.272	1.107	0.641	0.781	0.741	0.822
6.	Emotional response	18.037	2.147	16.815	5.294	0.649	0.787	0.749	0.819
7.	Role Perception	21.259	1.302	22.531	2.707	0.658	0.794	0.773	0.856
8.	Delivery of information	16.259	1.302	14.012	1.230	0.652	0.789	0.767	0.914
9.	prediction	17.259	0.833	17.012	1.874	0.742	0.852	0.893	0.825
10.	Scale Total Grade	184.111	1.582	169.901	2.436	0.764	0.866	0.801	0.933

*The scheduled (R) value at the indication level (0.05)=(0.220)

By studying a table (14) shows that the scale stability factor in the Alpha Kronbach method ranged from (0.819) to (0.914) as well as (0.933) for the overall degree of the scale,

and the measured stability factor ranged from (0.741) to (0.893) and (0.801) for the overall scale. In the Spearman-Brown way, it ranged from (0.761) to (0.852) and (0.866) for the overall scale, and the half-time retail coefficient ranged from (0.614) to (0.742) and (0.764) for the overall scale, and the internal consistency coefficient for all these skills was D; High meter stability factor.

Retesting method:

The researcher used this method in agreement with what **Safwat Faraj(2017)** pointed out that the method of retesting is one of the most important calculation stability, which is done by testing a group of individuals on a scale, then reapplying it again and in similar circumstances for the first time after a certain period of time and then calculating the correlation coefficients between the results of individuals in the two applications on the scale, and indicates the coefficient of correlation obtained to the stability of the scale (22: 349).

Therefore, the researcher applied the scale to the research sample and then reapplied it to them in similar circumstances for the first time with a interval of (22) days from 12/1/2020 to 23/1/2020 (initial application period) to 15/2/2020 until 26/2/2020 (second application period), and then the researcher found correlation coefficients between the two application scoring grades in both grades of communication skills and the nine degrees of total.

Table (15)

Correlation coefficient between the first application and re-application in the communication skills scale   (n=81)

N	Skills	First Application		Re-Application		"T" Value
		Arithmetic mean	Standard deviation	Arithmetic mean	Standard deviation	
1.	Effective listening	59.765	2.951	59.037	3.234	0.817*
2.	Using body language	35.469	4.830	33.630	6.742	0.858*
3.	Presence and vigilance	41.531	2.886	43.469	5.597	0.809*
4.	Speaking and persuasion	41.247	4.969	39.889	6.411	0.786*
5.	Positive handling	38.815	3.321	38.432	3.170	0.857*
6.	Emotional response	34.852	6.930	34.173	6.830	0.896*
7.	Role Perception	43.827	4.628	43.688	3.973	0.902*
8.	Delivery of information	31.198	1.669	31.272	1.314	0.728*
9.	prediction	33.444	2.962	34.272	2.495	0.646*
10.	Total degree	360.148	12.561	357.321	9.561	0.814*

*The scheduled (R) value at the indication level (0.05)=(0.220)

By studying a table (15) it is shown that there is a statistically significant relationship between the first application and the reapplication in the communication skills scale for the 4×100m consecutive racers and the overall score of the scale, as the calculated (R) value is greater than its scheduled value at a moral level (0.05), indicating the stability of the scale.

The communication skills gauge between the 4×100m relay in the Receiving and Handling Area in its final form:

After rationing the scale and conducting his sekumetric transactions, the researcher settled on the scale in its final form - annex (6) - which is of 88 words divided into 9 skills to measure these skills among the 4×100 meters relay racers in the Receiving and Handling Area during the race, which is illustrated by the following table:

Table (16)

Total positive and negative statement numbers for the communication skills scale in its final form

N	Communication skills	Phrase numbers		Total
		Positive	Negative	
1.	Effective listening	1-15-19-27-32-41-49-54-86	10-21-61	12
2.	Using body language	2-11-42-48-73-76-80-87	28-33	10
3.	Presence and vigilance	3-12-24-35-46-57-70-83-88	----	9
4.	Speaking and persuasion	4-13-16-22-29-34-37-43-52-58-64-78	67	13
5.	Positive handling	5-14-39-56-63-82	30-36-72	9
6.	Emotional response	17-38-66	6-47-51-59-74-79-85	10
7.	Role Perception	7-18-26-69-75-81	31-45-77-84	10
8.	Delivery of information	8-20-25-40-53-60-65	----	7
9.	prediction	9-23-44-50-55-62-68-71	----	8
Total	9	68	20	88

Statistical processing methods:

In view of the objective of the research and the results obtained, the following statistical treatments were made: Arithmetic Mean - Standard Deviation - Test "T" - Percentage - Ratial half Segmentation correlation coefficient - Pearson correlation coefficient - Spearman's correlation coefficient - Gatman correlation coefficient - Cronbach's alpha Coefficient.

View and discuss search results:

In view of the objects and questions of research, the researcher presents the results and discusses the research as follows:

With regard to the question of research: **What are the communication skills between 4x100-metre racers in the Receiving and Handling Area?**

Table (17)
Communication skills scale between 4×100m Contestants in the final form

N	Communication skills	Phrase numbers		Total
		Positive	Negative	
1.	Effective listening	1-15-19-27-32-41-49-54-86	10-21-61	12
2.	Using body language	2-11-42-48-73-76-80-87	28-33	10
3.	Presence and vigilance	3-12-24-35-46-57-70-83-88	----	9
4.	Speaking and persuasion	4-13-16-22-29-34-37-43-52-58-64-78	67	13
5.	Positive handling	5-14-39-56-63-82	30-36-72	9
6.	Emotional response	17-38-66	6-47-51-59-74-79-85	10
7.	Role Perception	7-18-26-69-75-81	31-45-77-84	10
8.	Delivery of information	8-20-25-40-53-60-65	----	7
9.	Prediction	9-23-44-50-55-62-68-71	----	8

By studying the table (17) it is found that the measure of communication skills between the contestants of 4×100 meters in the Receiving and Handling Area may be from 88 words (68 positive words + 20 negative words) distributed in 9 skills, as follows:

- First skill: Effective listening includes 12 phrases.

- Second skill: The use of body language includes 10 phrases.

- Third skill: Attendance and

vigilance, including 9 phrases.

-Fourth skill: Talk and Convince and includes 13 phrases.

-Fifth skill: Positive handling includes 9 phrases**.**

-Sixth skill: The emotional response includes 10 phrases.

-Seventh skill: Role recognition includes 10 phrases.

-Eighth skill: Information delivery includes 7 phrases.

-Ninth skill: Prediction includes 8 phrases.

The researcher explains that communication is an integrated process involving a set of skills through which all possible modes of expression, whether movement, nod, signal, word, symbol or any form of message, are effectively used to achieve an understanding between one contestant and another or a contestant and a group of contestants in one team during the 4x100-metre relay.

The successful communication process is only carried out using different communication skills in the sense that the 4×100m relay contestants must use verbal and non-verbal communication together during the race among themselves as a team team, Therefore, the researcher

believes that the message that is conveyed from one contestant to another contestant in the team does not succeed unless it contains words, symbols, signs, gestures and facial expressions ... etc.

This result is consistent with what **Yahya El-sayed Ismail (2001)** stated, where he stated that gestures and signals between players affect positively or negatively on the efficiency of communication between them during sports competitions, Players (49: 343).

This result is also consistent with the findings of **sahra Hanna Bolis study (2001)**, which found that the most common types of communication between players are positive verbal and non-verbal communication of a player with another player and a player with more than one player, and there is also a correlation between the positive verbal communication of a player variable with more than one player and the results of club matches a combined sample of research(20).

This result is also consistent with the results of **Domagoj Lausic Et, study (2015)**, which found that the winning players showed higher levels of verbal communication

and had a tendency to score higher in non-verbal communication elements, that winning teams frequently used emotional and cheerleading phrases, and the more consistent the communication patterns within the winning teams, the more responsive the players to non-verbal signals, which might enhance communication and play planning for those teams(50).

This result is also supported by what **Ahmed Amin Fawzi, Tarek Mohammed Badr-eldine (2001)** pointed out, that the network between the players is determined by the movement of each member of the team in the light of the rest of the movements of colleagues, which necessitates the expectation of the movements of colleagues and the movements of competitors, and therefore depends on the production of the team on the ability of all its members to communicate and understand to overcome the competitor in the circumstances of direct and indirect friction(3 : 41).

This result is consistent with what **Mohammed Hassan Allawi (2012)** sees, where he believes that the sports team is supposed to have a kind of interaction, cooperation and understanding between the players to try to achieve the common goals of the team, and it is assumed that every player in the cohesive team tries to do his best in cooperation with the rest of the colleagues and try to employ this individual effort to serve the goals of the team(35 : 349).

This result is supported by what **Terry Orlick (1986)** pointed out, where he pointed out that in order to succeed the sports team in achieving more achievements in sports competitions, each player must be aware of the role played in the sports team as well as the roles played by his colleagues so that he can provide them with support to improve performance and thus achieve better results in the sports competition or at least avoid collision and conflict between roles within the sports team group and not come unless the players realize and they are Aware of the use of effective communication skills between them while preparing to participate in sports competition(52 : 65).

This is also is supported by what **Radwa Suleiman Al Hamidat Study (2007)**, which found the construction of a 4-skill communication skills for

Jordanian university students: speaking skills, ability to understand others, listening skills, ability to manage emotion(17).

This result is supported by the study of **Mohamed Ibrahim Al-Baqiri, Safaa Mustafa Darwish (2007)**, where it reached the Structure of the scale of communication for the players of the collective games (football- handball- basketball- volleyball), whose axes were vigilance and understanding, the ability to organize the competitive climate, the ability to send signals, the ability to arrange goals, progress in the communication process(31).

This result is also consistent with the results of **Jamal Abu Bishara study (2013)**, where it found the resolution of oral and non-verbal communication between football players from the point of view of the players, which consisted of three focal points of communication: oral communication - non-verbal communication - the degree of communication in different situations of play, and all players in football, regardless of their positions on the field, tend to use similar forms of communication and the same

degree of communication in different situations of play; Among the players is very large by 86% in different playing positions(11).

This result is also consistent with the results of **Nahala Mohammed Awad study (2016)**, which found the Structure of the university students' communication skills scale of 5 communication skills: (effective listening, speaking and persuasion, the ability to understand others, empathy and expression of feelings, feedback(46).

Research conclusions:

In view of the purpose and question of the research and within the limits of the research sample and the tools used in data collection, the researcher was able to reach the following conclusions:

The communication skills scale was built between the 4×100 meters relay racers in the Receiving and Handling area, which proved its validity in identifying the nature of communication skills between the contestants of 4×100 meters relay in the delivery and delivery area, where the scale resulted in 88 words distributed on 9 communication skills as follows:

- First skill: Effective listening

includes 12 phrases.

- Second skill: The use of body language includes 10 phrases.

- Third skill: Attendance and vigilance, including 9 phrases.

- Fourth skill: Talk and Convince and includes 13 phrases.

- Fifth skill: Positive handling includes 9 phrases**.**

- Sixth skill: The emotional response includes 10 phrases.

- Seventh skill: Role recognition includes 10 phrases.

- Eighth skill: Information delivery includes 7 phrases.

- Ninth skill: Prediction includes 8 phrases.

The scale has a degree of response according to the five-magnitude scale: The overall score of the scale ranges from a maximum of 440 degrees to a minimum of 88 degrees the scale contains 68 positive words, and 20 negative words.

Research recommendations:
In view of the results of the research and the conclusions, the researcher recommends:

- In order to identify the nature of the communication skills and the motor interactions between the contestants of the team during the race, it is necessary for the Athletics coaches to be interested in applying the 4x100 metre relay in the Receiving and Handling area.

- Need to develop practical programmes for the development of communication skills among 4 x 100 metre relay Contestants.

- Emphasis on athletics trainers (relay trainers) to the need to adopt a set of references, words, gestures and special movements that are common among the contestants for use during the $4\times100m$ relay stages.

- Educating athletics trainers (relay coaches) on the need to build a system of non-verbal signals (especially with small age groups) for such as this type of communication and its effectiveness, especially when verbal communication cannot be used.

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