The effect of an educational program using immediate and postponed feedback to learning breast stroke

Mohamed A. Makled'
- Banha University
Abstract

This study is an attempt to identify on the effect of immediate and postponed feedback to learning breast stroke for buds; the researcher used the experimental method using the experimental design of four groups

Use a sample of $({}^{\mbox{\scriptsize γ}}{}^{\mbox{\scriptsize Λ}})$ buds, divided into four groups, equally each $({}^{\mbox{\scriptsize γ}})$ buds at Delmon Sports Club in Benha.

- The first experimental sample: consisted of (\(^{\neq}\)) bud, to study the program with immediate feedback.
- The second experimental sample: consisted of (\(^{\forall}\)) bud, to study the program, postponed post-feedback after the educational unit.
- Third Pilot Sample: consisted of (\(^{\forall}\)) bud to study the program by post-feedback and before the next unit
- Control sample: consisting of (\(^{\neq}\)) buds, and they are studying using the verbal explanation from the teacher

The most important results

- \'- Immediate feedback is one of the best ways and means to use in teaching Brest stroke.
- Y- Postponed feedback to the next educational unit is better than postponed to the end of the educational unit
- Y- Postponed feedback to the end of the educational unit is better than traditional methods of teaching breast stroke

Key words(feedback - Immediate feedback - Postponed feedback - breast stroke)

Introduction

In swimming competitions, the swimmer advances through the water medium, relying on the tureens of the arms and legs of the legs to produce the driving force to overcome the water resistances that hinder the body's progress to cover the specified distances in the shortest possible time, so there is no way to do that except with technical performance consistent with mechanical and technical principles and principles through a codified training And a regular practice with correcting any errors that might hinder access to the method of correct technical performance. (Mohamed Ali al-Qat, 2000,p46)

And since the teaching methods vary according to the capabilities of the students, therefore, the methods that suit the needs of the pupils must be chosen by the effects of their motivation and the successful teacher is the one who can modify the students 'thinking and help them correct their mistakes so that in the day they reach the correct result and feedback is one of the

Dp. theories and applications of aquatic sports department Faculty of Physical Education for men Banha University , Mohamed.makled@fped.bu.edu.eg

methods that have the ability to Determining the learner's sufficiency and development, as well as enabling him to identify and correct his mistakes (*Ahmed Ashmawi*, 2006, p38)

The importance of feedback is due, in the eyes of many psychologists, to many considerations, foremost among which are the effects of the learner's motivation towards learning by completing the correct responses and avoiding the wrong response, and then it leads the learner to correct their wrong response, and is considered as an enhancement or confirmation of the correct responses. (*Abdul Wahab Kamel*, 2011, p71)

Three main patterns of sensory feedback patterns come through what supplies the senses to the individual from knowledge of the individual and the second is feedback from the knowledge of the individual with a degree of information that helps him to understand the best situations and the third is feedback from knowledge of the results and the extent of success in performing the required work

The feedback was rating into:

- \ Source of feedback (internal and external)
- Y- Synchronization with response (syndrome and final)
- The time period between response occurrence and providing feedback (immediate postponed).
- €- Format of feedback information (verbal and written)
- o- Distribution of feedback (separate and cumulative)
- 7- The amount of feedback (relative repetition and absolute repetition)
- Y- The nature of feedback (individual and social)
- Λ- After the feedback (positive and negative)
- 9- Knowing the individual with some amount of information (qualitative and quantitative)
- Notifying the learner of the results of his performance (informative and corrective) (Magill, R.A, 2001, p216)

And because feedback on different types, patterns, and many uses affects directly and clearly the educational process, it has become one of the best teaching methods and educational practices in classroom situations, so I entered the field of research and experiment. Several studies and researches were conducted to know their effectiveness in the performance of learners and their academic achievement and motivation for learning. (Siedentop, D. & Eteal, 2004, p102)

Research problem:

The most important reasons that hinder the correct method of performance and lead to the appearance of errors, which are poor knowledge and understanding of the technical and special aspects (technical) and insufficient physical performance In light of this concept, it is necessary during the teaching and learning process in swimming to know the sequence of the movements to be performed and how to direct them with the assistance of building on the technical analysis of performance, which is intended to explain clearly the form and direction of movement performed by the swimmer, which aims to produce the final image of the performance The most economical of the movements to overcome the time factor (*Ali Tawfiq*, 1996, p50)

And teaching breast stroke swimming to the buds in a correct way is a big challenge that requires the coach a great effort, as it is considered that breast stroke swimming skills are a complex skill for most young swimmers, and indicates that it must be realized that it needs a great time to learn and master well. (Sahar Abdulaziz, 2002, p75)

Swimming of the breast stroke is considered a difficult swimmer due to the difficulty of compatibility between the arms and legs, as the water component in it is large, which impedes the movement of the body forward, and the only swimming in which the two men have an effective role in it is considered to be equivalent to the effect of the arms on the movement of the body forward, and It is worth noting that the reactionary stage in breast stroke swimming is inside the aqueous medium, unlike the rest of the other methods of swimming in which the reactionary legs are outside the water, which increases the driving resistance of the swimmer during the performance (Mohamed Ali al-Qat, 2000, p95)

This difficulty in learning breast stroke swimming due to the high levels of harmony in the legs strokes and between the strokes of the men and arms in the breast stroke swim, which the researcher was invited to try to identify the impact of interest in the recurring nutrition in learning to swim in both types (immediate and postponed) and to know which is better in improving the level of swimming performance The breast stroke, in an effort by the researcher to provide a way that enables him to teach breast stroke swimming and gain a good performance in the least time and effort possible.

Aim of the research This study is an attempt to identify on the effect of immediate and postponed feedback to learning breast stroke for buds

Hypotheses: There are statistically significant differences at the level of significance $\cdot, \cdot \circ$ between the four groups (experimental 1 , experimental 2 , experimental 2 , control) in the level of learning to swim in the buds and in favor of the post-measurement of the first experimental group.

Method

Design: The researcher used the experimental method using the experimental design of four experimental groups and a control group

sample : Use a sample of $({}^{\forall}{}^{\land})$ buds, divided into four groups, equally each $({}^{\forall})$ buds at Delmon Sports Club in Benha.

- The first experimental sample: consisted of (Y) bud, to study the program with immediate feedback.
- The second experimental sample: consisted of (\(^{\forall}\)) bud, to study the program, postponed post-feedback after the educational unit.
- Third Pilot Sample: consisted of (\forall) bud to study the program by post-feedback and before the next unit

- Control sample: consisting of (\(^{\neq}\)) buds, and they are studying using the verbal explanation from the teacher

Table (1) Homogeneity of research personnel in anthropometric variables

	nomogeneity of research personner in until opometric variables								
	Mean	Median	Std.	Skew.					
Age	171,7128	17.	9,75111	_•,۲۷۳					
Length	1 2 .	1 2 .	۲,۰۳٦٧	•					
the weight	TT,0T0V	٣٣	7,02077	٠,٤٧٨					
Training age	TE,. TOY	٣٤	۲,٥٨٨٩	_•,•£٢					
Arm length	٦٢,٩٢٨٦	٦٣	1,07171	_+,07 {					
Palm length	10,1979	١٦	1,878.7	٠,١١٩					
Palm show	٦,٥	٦,٥	1,17100	•					
Thigh length	٤٠,٣٥٧١	٤٠	1, ٧ • ٤٣٤	٠,١١٨					
Leg length	٣٨,٠٧١٤	٣٨	7, £1797	٠,٢٤٩					
Foot length	19,7071	19	1, ٧ • ٤٣٤	٠,١١٨					
Foot width	٧,٨٩٢٩	٨	1,877.7	٠,١١٩					
Horizontal shoulder elasticity	77,7127	٦٣	7,71017	٠,٢٠٢					
vertical shoulder elasticity	71,1979	77	1,577.7	٠,١١٩					

Is evident from Table () that the torsion coefficient is limited between \pm $^{\tau}$, the data is distributed naturally distribution suggesting homogeneity

Table (7) Homogeneity of sample individuals researching skill variables

	Mean	Median	Std.	Skew.
Start	۳,٦٧٨٦	٣,٥	۰,۷۷۲۳۷	٠,٦٤٦
The first Yo m	٤,٣٢١٤	٤	۰,۷۲۲۸۳	٠٠,٥٨٤
Tureen	٤,٥	٤,٥	۰,۸۳۸۸۷	•
The second Yo m	٣,٧٨٥٧	٤	١١٨٢٥,٠	,- ۲۷
The end	٠,٢٥	•	٠,٤٤٠٩٦	1,771
Total	17,0807	۱۷	1,79879	٠,٥١٧

Is evident from Table () that the torsion coefficient is limited between \pm $^{\tau}$, the data is distributed naturally distribution suggesting homogeneity

Table (r): Anova to four research groups in the anthropometric variables

Table (†): Allova	to four research gr	o four research groups in the anthropometric variables								
		Sum of	Df.	Mean	f.	Sig.				
		squares		squares						
Age	Between groups	177,879	٣	٤١,١٤٣	٠,٤١٤	۰,٧٤٥				
	Within groups	777,777	۲ ٤	99,279						
	total	40.9,415	7 7							
Training age	Between groups	•	٣	•	•	١				
	Within groups	117	7 £	٤,٦٦٧						
	total	١١٢	77							
the weight	Between groups	۸,۱۰۷	٣	۲,۷۰۲	۰,۳۸۹	۲,۲۲, ۰				
	Within groups	177,107	7 £	7,907						
	total	175,975	77							
Length	Between groups	1,077	٣	٠,٥١٢	٠,٠٦٨	٠,٩٧٦				
	Within groups	179,579	7 £	٧,٤٧٦						
	total	11.975	77							
Arm length	Between groups	٠,٧١٤	٣	٠,٢٣٨	•,•٨٨	٠,٩٦٦				
	Within groups	70,158	7 £	۲,۷۱٤						
	total	70,101	77							
Palm length	Between groups	٢,٩٦٤	٣	٠,٩٨٨	٠,٤٥٩	٠,٧١٤				
	Within groups	01,715	7 £	۲,۱٥٥						
	total	०१,२४१	77							
Palm show	Between groups	٠,٧١٤	٣	٠,٢٣٨	٠,١٦٧	٠,٩١٨				
	Within groups	٣٤,٢٨٦	7 5	1,279						
	total	70	77							
Thigh length	Between groups	٠,٧١٤	٣	٠,٢٣٨	٠,٠٧٤	٠,٩٧٤				
	Within groups	٧٧,٧١٤	۲ ٤	٣,٢٣٨						
	total	٧٨,٤٢٩	77							
Leg length	Between groups	17,712	٣	٤,٢٣٨	٠,٧٠١	٠,٥٦١				
	Within groups	180,188	۲ ٤	٦,•٤٨						
	total	104,404	77							
Foot length	Between groups	٠,٧١٤	٣	٠,٢٣٨	٠,٠٧٤	٠,٩٧٤				
	Within groups	٧٧,٧١٤	۲ ٤	٣,٢٣٨						
	total	٧٨,٤٢٩	77							
Foot width	Between groups	1,70	٣	٠,٤١٧	٠,١٨٧	٠,٩٠٤				
	Within groups	08,289	7 £	7,777						
	total	०१,२४१	77							
Horizontal	Between groups	٠,٧١٤	٣	۰,۲۳۸	٠,٠٤	٠,٩٨٩				
shoulder elasticity	Within groups	1 £ £	7 £	٦						
	total	1	77							
vertical shoulder	Between groups	1,70	٣	٠,٤١٧	٠,١٨٧	٠,٩٠٤				
elasticity	Within groups	07,879	۲ ٤	7,777	1					
	total	08,779	77	1						

Table ($^{\circ}$) shows that the value of the calculated p is greater than the value of the tabular and statistical significance is greater than $^{\circ},^{\circ}$, which indicates that there are no statistically significant differences at the level of significance $^{\circ},^{\circ}$, which indicates the equivalence of the sample search in anthropometric variables.

Table (4) Anova for performance of swimming breast stroke

		Sum of squares	Df.	Mean squares	f.	Sig.
Start	Between groups	۰,۳۹۳	٣	٠,١٣١	٠,٢	۰٫۸۹٥
	Within groups	10,718	7 ٤	٠,٦٥٥		
	total	17,1.7	۲۷			
The first Yo m	Between groups	۰,٦٧٩	٣	۲۲۲٫۰	٠,٤٠٤	۰,۷٥١
	Within groups	17,279	7 ٤	٠,٥٦		
	total	۱٤,١٠٧	۲۷			
Tureen	Between groups	٠,٤٢٩	٣	٠,١٤٣	٠,١٨٥	٠,٩٠٦
	Within groups	۱۸,۵۷۱	7 ٤	٠,٧٧٤		
	total	19	۲۷			
The second Yo m	Between groups	۰,۷۱٤	٣	۰,۲۳۸	٠,٧١٤	٠,٥٥٣
	Within groups	٨	7 ٤	۰,۳۳۳		
	total	۸٫۷۱٤	۲۷			
finish	Between groups	٠,١٠٧	٣	٠,٠٣٦	٠,١٦٧	۰٫۹۱۸
	Within groups	0,128	7 ٤	٠,٢١٤		
	total	0,70	۲۷			
Total	Between groups	٧,٢٥	٣	۲,٤۱۷	۰,۷۲۸	٠,٥٤٦
	Within groups	۷۹,۷۱٤	7 ٤	٣,٣٢١		
	total	۸٦,٩٦٤	۲۷			

Table (\mathfrak{t}) shows that the value of the calculated p is greater than the value of the tabular and the statistical significance is greater than $\mathfrak{t},\mathfrak{t},\mathfrak{o}$, which indicates that there are no statistically significant differences at the level of significance $\mathfrak{t},\mathfrak{o},\mathfrak{o}$, which indicates the equivalence of the sample search in the level of breast stroke swim performance

Data collection tools and means:

- A medical scale for measuring weight
- A two-pass device for measuring length
- The Maglecchio protractor to measure joint elasticity
- Swimming pool
- Floatation board
- Stand to carry the display screen
- Samsung 7. inch Smart Display

- Y Canon cameras with high accuracy of photography and the possibility of connecting to the laptop wireless
- Laptop
- Program for viewing videos on the computer vc Media player
- A portable router that belongs to Vodafone
- Performance evaluation form for swimming breast stroke approved by the Egyptian Swimming Federation
- Dvr device to store videos
- Free Video Cutter

Steps to conduct a search

Preparing the educational program:

The foundations of program development:

- The suitability of the program for the Sunni phase, and the use of some local and international programs that have been developed in that area, and the availability of the safety and security factor.
- Inclusiveness and balance of development of parts of the body so that no focus is placed on one part without the other.
- Continuity and regularity so as not to lose the impact of previous exercises.
- The arrangement of the contents in the unit helps to achieve the best possible productivity to achieve its goals.
- One of the most important drivers of increased motivation is informing the individual of progress in his or her level first.
- The flexibility of the program to incorporate some of the loved elements into the soul away from boredom and monotony.

Program design

The researcher has access to the Internet (Internet) and research and studies related to the subject of research, as well as books and scientific references on the subject of research and the like, the researcher designed a form to specify the educational program attached () through the analysis of local and international programs such as:

- The European-American Swimming Education Program.
- College Misericordia College program in Pennsylvania, USA.
- Australian Swimming Education Program.
- American Red Cross Program.
- IU American University Program.
- White University Program.
- $\xi \times Y = \xi \wedge$ hours swimming instruction program prepared by (Abu El-Ela Abdel Fattah).

The researcher reached to define the educational goals for each program, then set the educational goals and components of the educational program for breast stroke swimming, and they were presented to the experts, and then the researcher reached the components of the educational program

Duration of the program: one and a half months

Dental phase: Swimming buds from (9 - 11) years.

Number of learning times per week: Two (7) educational lessons per week.

Unit time: $(9 \cdot BC)$ have and hours per day.

Number of educational lessons: $({}^{\gamma}\xi)$ an educational lesson distributed as follows:

- 1. Introductory Lesson (1) (Lesson One).
- 7. Lessons to teach the skill of foot strikes (7) (from the second lesson to the eighth lesson).
- T. Breathing in breaststroke swimming (1) (Lesson Nine)
- ξ . Lessons to teach the skill of farmer movements (ξ) (Lesson Ten to Lesson Thirteen).
- o. Lessons to teach arm movements and coordination with leg strikes (1) (fourteenth).
- 7 . Coordination with the movements of the arms and legs and breathing (7) (fifteenth and sixteenth).
- Y. Teaching the full start with swimming (Y) (seventeenth and eighteenth)
- [^]. Teaching touch and rotation in breaststroke swimming ([^]) (nineteenth and twenty-first)
- 9 . Performing the breaststroke in full, starting and turning ($^{\xi}$) (from lessons twenty-one to twenty-four).

The $\[\gamma \]$ -second video presentation period for the second experimental group to be displayed after the educational unit. The video display for the third experimental group to be displayed before the educational unit.

Videos of r s have been added to the first experimental group on the educational unit to be r s, as the presentation will include inside the educational unit and after performing each exercise during the educational unit

Preparing feedback methods:

- '- The researcher has prepared a number ($^{\Upsilon \Upsilon}$) video of performing the parts of the motor skill (buoyancy the legs strokes arm movements compatibility breathing and the performance of swimming in full) under study and making sure of their clarity in the vision
- 7- The researcher equipped the Smart Display with its stand
- ^γ- The researcher prepared ^γ cameras with their stand where one of them was installed with the width of the swimming pool and the second along the length of the bath and in the same field of performing buds for performance exercises.
- [£]- Connecting the camera to a DVR device to record what is filmed during the educational unit and the ability to play back at different speeds
- o- The researcher prepared a laptop with a video player program vc media player and a program to cut videos to smaller videos Free Video Cutter

The Survey:

The researcher conducted a survey study to make sure all the connections to the work unit, which consist of a camera connected to a power source and a DVR device to photograph and save with

the ability to restart it on the display screen and linked to the laptop through the mobile Wi-Fi network and confirmed the possibility of photography and display again and the possibility of display From the lab on the display screen for previously prepared videos, and the photography was based on one of the researcher's assistants, and the researcher was able to set all connections for the above mentioned devices, and they work efficiently and in the same field of the educational unit.

Tribal Measurement: The researcher conducted the pre-measurement of the research sample on $1/1/7 \cdot 1/4$, for a group of anthropometric and skill measurements using three residents, where the score was calculated by taking the mean

Basic experience

The researcher conducted the basic study in the period from

For the first experimental group: from $\gamma/\gamma/\gamma \cdot \gamma \wedge$ to $\gamma \cdot \xi/\gamma/\gamma \cdot \gamma \wedge$ by performing the educational unit and inside it the researcher displays the video of each bud for him in front of the display screen then perform the video presentation to perform the proper after each performance with an explanation of the differences for the bud and then perform the skill again

For the second experimental group: from $(\gamma)/(\gamma)$ to $(\gamma)/(\gamma)$, by performing the educational unit, the researcher will photograph the performance of the students and then display the performance that was photographed after the completion of the educational unit with an explanation of the errors and display the videos that were prepared to perform the segmented motor skills to suit All alone and clarify the differences between bud performance and proper performance.

The third experimental group: from $\frac{1}{2}/\frac{1}{2}$ to $\frac{1}{2}/\frac{1}{2}$, by performing the educational unit and photographing each bud in his performance during the unit and then displays the videos of each bud about the educational unit $\frac{1}{2}$ for example before starting the educational unit $\frac{1}{2}$ with clarifying the differences between the performance of the buds And proper performance.

Control group: From $\xi/1/\gamma \cdot 1\Lambda$ to $\gamma \gamma/\gamma \cdot 1\Lambda$ where the researcher conducted the basic experiment with the traditional explanation.

Dimensional measurement: The researcher made the dimensional measurements of the research samples as follows

The first experimental group is on Yo/Y/Y· 1 A

The second experimental group on Y7/Y/Y· \ \

The third experimental group on $\Upsilon V/\Upsilon /\Upsilon \cdot \Upsilon \Lambda$

The control group was on YV/Y/Y· \ \ A

It has to be in the same manner of performance and in the same conditions as for tribal measurement

Results

Table (٦) ANOVA to Dimensional measurements of the four groups

		Sum of squares	Df.	Mean squares	f.	Sig.
Start	Between groups	79,077	٣	77,179	٤٢,٣٢٦	. * * *
	Within groups	17,157	۲ ٤	۸٤٥.		
	total	۸۲,٦٧٩	77			
	Between groups	٧٤,٩٦٤	٣	7 £ , 9 A A	٥٨,٣٠٦	. * * *
The first Yo m	Within groups	۲۸۲,۰۱	۲ ٤	. ٤٢٩		
	total	10,70.	77			
	Between groups	٧٠,١٤٣	٣	۲۳,۳۸۱	٣٩,٢٨٠	.***
Tureen	Within groups	۱٤,۲۸٦	7	.090		
	total	۸٤,٤٢٩	77			
The second Yo m	Between groups	٦٧,٠٠٠	٣	77,777	००,१४२	.* * *
	Within groups	9,715	7 £	٠٤٠٥		
	total	٧٦,٧١٤	77			
finish	Between groups	.۱۰۷	٣	۲۳۰.	1,	.٤١٠
	Within groups	۷٥٨.	۲ ٤	۲۳۰.		
	total	.97٤	77			
total	Between groups	1155,779	٣	۳۸۱,٥٦٠	۱۸۲,۱۰۸	.***
	Within groups	٥٠,٢٨٦	۲ ٤	۲,٠٩٥		
	total	1195,975	77			

Table (7) shows that there are statistically significant differences at the level of significance •,•• between the dimensional measurements of the four groups except for the end of swimming breast stroke, there are no differences.

Table $(\mbox{$^{\lor}$})$ L.S.D test between the four dimensional measurements

		mean	Std.	Experimental ۲	Experimental ۳	Control group
	Experimental \	٠.٦٩	۱۰.۸٦	-1.15	*.**	-۳.۸٦
	Experimental ۲	٠.٧٦	۹.٧١		1.15	-7.71
	Experimental ٣	٠.٦٩	۱۰.۸٦			-۳.۸٦
start	Control group	۰.۸۲	٧.٠٠			
	Experimental \	٠.٤٩	11.41	-1.58	-1.58	-1.19
	Experimental ۲	٠.٧٦	١٠.٢٩		1.15	-۲.٧١
	Experimental ۳	٠.٧٩	11.58			-۳.۸٦
FirstYom	Control group	۰.۰۳	٧.٥٧			
	Experimental \	٠.٤٩	11.41	-1.15	۲۹	
	Experimental ۲	٠.٩٨	107		۰.۸٦	۲۸.۲–
	Experimental **	٠.٧٩	11.58			-٣.٧١
tureen	Control group	٠.٧٦	٧.٧١			
	Experimental \	٠.٦٩	11.18	-1.5٣	١٤	۲۸.۳-
	Experimental ۲	٠.٤٩	۹.٧١		1.79	-7.58
The second	Experimental **	٠.٨٢	11			-٣.٧١
۲٥ m	Control group	٠.٤٩	٧.٢٩			
	Experimental \	•.••	۲	*.**	*.**	1٤
	Experimental ۲	*.**	۲.۰۰			١٤
	Experimental *		۲.۰۰			١٤
finish	Control group	۸۳.۰	١.٨٦			
	Experimental \	٠.٩٨	٤٧.٤٣	-0.1 £	-·. Y1	-17
	Experimental ۲	١.٨٠	٤٢.٢٩		٤.٤٣	-1
	Experimental *	١.٦٠	٤٦.٧١			-10.79
total	Control group	1.77	٣١.٤٣			

Table ($^{\lor}$) shows that there are differences between all groups except for experimental group $^{\backprime}$ and experimental group $^{\backprime}$ and the absence of statistically significant differences between all groups at the end.

Table $(^{\wedge})$ percentage of improvement for the four groups in the level of breast stroke swim performance

	Before		after			
	mean	Std.	mean	.Std	difference	%
Experimental \	٣,٥٧١٤٢٩	•,٧٨٦٧٩٦	1.,00112	•,٦٩••٦٦	٧,٢٨٥٧١٤	۲۰٤٪
Experimental Y	٣,٥٧١٤٢٩	٠,٧٨٦٧٩٦	9,712777	٠,٧٥٥٩٢٩	7,157107	177%
Experimental ^٣	٣,٧١٤٢٨٦	.,٧009٢9	1.,10415	٠,٦٩٠٠٦٦	٧,١٤٢٨٥٧	197%
Control group	٣,٨٥٧١٤٣	٠,٨٩٩٧٣٥	٧	٠,٨١٦٤٩٧	٣,1٤٢٨٥٧	A1%
Experimental \	٤,٢٨٥٧١٤	.,٧००٩٢٩	11,71279	٠,٤٨٧٩٥	٧,٤٢٨٥٧١	۱۷۳٪
Experimental Y	٤,١٤٢٨٥٧	٠,٨٩٩٧٣٥	1.,71011	1,400919	7,157107	۱٤٨٪
Experimental ^٣	٤,٢٨٥٧١٤	.,٧009٢9	11,57107	٠,٧٨٦٧٩٦	٧,١٤٢٨٥٧	177%
Control group	٤,٥٧١٤٢٩	•,075077	٧,٥٧١٤٢٩	.,075077	٣	٦٦٪
Experimental \	٤,٢٨٥٧١٤	•,٧००٩٢٩	11,71279	٠,٤٨٧٩٥	٧,٤٢٨٥٧١	۱۷۳٪
Experimental Y	٤,٥٧١٤٢٩	٠,٩٧٥٩	1.,07128	٠,٩٧٥٩	٦	181%
Experimental ^r	٤,٥٧١٤٢٩	٠,٩٧٥٩	11,57107	٠,٧٨٦٧٩٦	7,107128	10.%
Control group	٤,٥٧١٤٢٩	•,٧٨٦٧٩٦	٧,٧١٤٢٨٦	.,٧००٩٢٩	٣,1٤٢٨٥٧	٦٩٪
Experimental \	٣,٧١٤٢٨٦	٠,٤٨٧٩٥	11,12777	٠,٦٩٠٠٦٦	٧,٤٢٨٥٧١	۲۰۰%
Experimental Y	٣,٥٧١٤٢٩	.,075077	9,715777	٠,٤٨٧٩٥	7,157107	177%
Experimental ^٣	٣,٨٥٧١٤٣	٠,٦٩٠٠٦٦	11	٠,٨١٦٤٩٧	٧,١٤٢٨٥٧	110%
Control group	٤	•,0٧٧٣0	٧,٢٨٥٧١٤	٠,٤٨٧٩٥	٣,٢٨٥٧١٤	۸۲٪
Experimental \	•,127107	٠,٣٧٧٩٦٤	۲	•	1,107128	18%
Experimental Y	٠,٢٨٥٧١٤	٠,٤٨٧٩٥	۲	•	1,712777	٦٠٠٪
Experimental ^٣	٠,٢٨٥٧١٤	٠,٤٨٧٩٥	۲	•	1,712777	٦٠٠٪
Control group	٠,٢٨٥٧١٤	•, £1490	1,107158	٠,٣٧٧٩٦٤	1,071279	00.%
Experimental \	١٦	1, £1 £ 7 1 £	٤٧,٤٢٨٥٧	٠,٩٧٥٩	T1, £710V	197%
Experimental Y	17,15777	1,9011	٤٢,٢٨٥٧١	1,799571	77,15777	177%
Experimental ^r	17,71279	1,977.57	٤٦,٧١٤٢٩	1,7.8077	٣.	179%
Control group	14,42041	1,789877	71,57107	1,777£17	15,15777	۸۲٪
	Experimental Y Experimental Y Control group Experimental Y	Experimental \(T,0V\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Experimental 1 \$\tau, \text{V1\colored}{\colored}\$ \text{, \text{VATV9T}} Experimental 7 \$\tau, \text{V1\colored}{\colored}\$ \text{, \text{VATV9T}} Experimental 8 \$\tau, \text{V0\colored}{\colored}\$ \text{, \text{V0\colored}\$\colored}\$ Control group \$\colored, \text{VAV1\colored}\$ \text{, \text{V0\colored}\$\colored}\$ Experimental 7 \$\colored, \text{V0\colored}\$\colored\$ Experimental 1 \$\colored, \text{V1\colored}\$\colored\$ Experimental 7 \$\colored, \text{V0\colored}\$\colored\$ Experimental 8 \$\colored, \text{V1\colored}\$\colored\$ Experimental 9 \$\colored, \text{V1\colored}\$\colored\$ Experimental 1 \$\colored, \text{V1\colored}\$\colored\$ Experimental 7 \$\colored, \text{V1\colored}\$\colored\$ Experimental 9 \$\colored, \text{V1\colored}\$\colored\$ Experimental 1 \$\colored, \text{V1\colored}\$\colored\$ \$\co	mean	mean Std. mean Std. Experimental T,0V EY9 .,VATV91 1.,A0V E .,1911 Experimental T,0V EY9 .,VATV91 9,V EYA1 .,V009Y9 Experimental T,V EYA1 .,V009Y9 1.,A0V E .,1911 Control group T,A0V E .,A94VT0 V .,A11E9V Experimental E,YA0V E .,V009Y9 11,V EY9 .,EAV90 Experimental E,YA0V E .,V009Y9 11,EYA0V .,V009Y9 Experimental E,YA0V E .,V009Y9 11,EYA0V .,VA1V91 Control group E,0V EY9 .,0TE0YY V,0V EY9 .,0TE0YY Experimental E,YA0V E .,V009Y9 11,V EY9 .,EAV90 Experimental E,0V EY9 .,9V09 11,EYA0V .,VA1V91 Experimental E,0V EY9 .,VA1V91 V,V EYA1 .,V009Y9 Experimental E,0V EY9 .,VA1V91 V,V EYA1 .,V009Y9 Experimental T,0V EYA1 .,EAV90 11,EYA1 .,EAV90 Experimental T,0V EY9 .,OTE0YY 9,V EYA1 .,EAV90 Experimental T,0V EY0 .,EAV90 Y . Experimental T,0V EY0 .,EAV90 Y . Experimental T,0V EY0 .,EAV90 Y . Experimental T,0V EY1 T,0V EY1	mean Std. mean Std. difference

Table (^) percentage of improvement for the four groups in the level of breast stroke swim performance

Discuss the results:

Table (7) shows a statistically significant difference at the level of significance •,•° between the four groups in the dimensional measurement where the value of the calculated p was greater than the value of the tabular as the value of the statistical significance is smaller than the value of •,•° except for the end variable

Table (V) shows that there are differences in the means between the first experimental group and the second experimental group and the control in all variables except for the end variable

It is also evident that there are statistically significant differences at the level of ', 'o between the third experimental group and the second experimental group and the control in all variables except for the end variable in favor of the third experimental group

It is also clear from the presence of statistically significant differences at the level of significance ... between the second experimental group and the control group in all variables except for the end variable in favor of the second experimental group

It is also evident that there are no statistically significant differences at the ', 'o' specificity level between the first experimental group and the third experimental group in the level of breast stroke swim performance

While it is clear from Table (^) that the first experimental group outperformed all groups in the improvement rate and the third experimental group outperformed the improvement rates over all groups except for the first experimental group while the second group outperformed the control group in the improvement rate

The researcher attributes this improvement to the use of feedback, as using it in its various ways leads to an improvement over the traditional method, as it is characterized by its immediate use during performance to improve the level more than the deferred use after the educational unit or at the beginning of the second unit, due to the importance of feedback and the extent of its effectiveness in skills Kinetic performance that needs high compatibility

This finding is consistent with the study of Magill, R.A. (2001) (12) Niilo, Knttine. (2004) (13) Ahmed El Sayed Saeed Mohamed Ashmawi (2006) (2) Abdel Wahab Kamel (2011) (6) Mohamed Atef Ahmed El Deeb (2012) (13) Esraa Sabry Ahmed Ismail (2013) (3) Abdullah Saad Abdel Gawad: (2017) (7), where all these studies indicated the extent of the effect of the educational program on the level of motor performance with different motor skills under study and the extent of the impact of feedback or reactionary on the level of motor performance of the skills

Conclusions and Recommendations

Conclusions:

- \text{\congruence} Instant feedback is one of the best ways, means, and methods that can be used in teaching chest swimming
- 7- Postponed feedback to the next educational unit is better than postponed to the end of the educational unit
- ν- Deferred feedback to the end of the educational unit is better than traditional methods of teaching swimming pool.
- £- Photographing students while they are swimming and displaying them again, and comparing them with the correct performance, motivates students to perform the correct way, then discovering mistakes and quickly fixing them

Recommendations:

- \- The necessity of providing different educational means for swimming pools and its divisions of computers, video, cameras and display screens for use in the process of teaching and teaching swimming sports.
- 7- Focusing on using the feedback method in proportion to the intended skill in the education process to correct mistakes
- ^r The necessity of knowing the employees and those in charge of the educational process with different educational methods in order to contribute to delivering the educational information in the shortest time.
- £- The necessity of conducting similar studies on the rest of the skills of swimming, water sports and other games

References

-)- **Abu Al-Ella Ahmed Abdel-Fattah** (۱۹۹٦): ξ x $Y = \xi \wedge$ to learn swimming, Dar Al-Fikr Al-Arabi, Cairo.
- 7- Ahmed El-Sayed Said Mohamed Ashmawy (* · · *): "The effect of nutritional feeding on improving the skill performance of the Burmah Al-Wasat movement for wrestlers. Thesis (MA) Benha University. Faculty of Physical Education for Boys
- r- Israa Sabry Ahmed Ismail (۲۰۱۳): The effect of immediate reactionary feeding on the level of performance of the front flip-flop skill on the hands on the horse jumping device for students of the Faculty of Physical Education Thesis (MA) Helwan University. College of Physical Education for Girls on the island
- **Sahar Abdel Aziz Mohamed** (* • * *): The effectiveness of using mini-training on developing chest swimming skills among students of the Faculty of Physical Education for Girls, Master Thesis, Helwan University.
- o- Shams Al-Din Mahmoud (Y··Y): The effect of using a program for special purpose exercises on the level of technical performance of chest swimming for buds, Master Thesis, unpublished, Faculty of Physical Education for Boys in Cairo, Helwan University.
- 1- **Abdel-Wahab Kamel** (* • •): revealing the effectiveness of both cognitive training and vital feedback training and merging them (as an introduction to integrated training in light of the overall model of brain functions) Tanta University, Faculty of Education
- Y- **Abdullah Saad Abdul-Jawad:** (Y·YY): The effect of using remote feedback on learning some handball skills. The research aims to influence the use of reactionary remote feeding on teaching some handball skills., Thesis (MA) Mansoura University. Faculty of Physical Education
- A- Ali Muhammad Tawfiq (1997): Swimming for Children and Young People, Publishing House, Cairo.
- **Mohamed Atef Ahmed El-Deeb** (Y·)Y: The effect of using some of the feedback methods to improve performance in sports shows for students of the Faculty of Physical Education for Boys, thesis (PhD) Tanta University. Faculty of Education

- ' ·- **Muhammad Ali Al-Qat (· · · AD):** Scientific Principles of Swimming, Al-Azizi Computer Library, Zagazig.
- '\-Brooks, Lacne & Sqwhill (\(\gamma\cdot\cdot\cdot\): The Biomechanical Iteraction of lift and Propulsion forces during skills breast swimming medicine and science in sport and exercise, \(\gamma\gamma\) (\(\gamma\)).
- Y-Magill, R.A. (Y··): "Feedback effects". In: B. Singer. H. Hau senblas & C. Jannelle (Eds.). Handbook of Sport Ps ychology. Ynd Edition. N. Y. John Wiley & Sons
- Y-Niilo, Knttine. (Y··•): "The effects of augmented auditory feedback on psychomotor skill learning. in precision shoting". Journal of sport and exercise psychology. Y¬(Y). june.
- 15-Siedentop, D. & Tannehill n. Kaiso, Mononen. Jukka, viitasalo. Toni, mets. (7 · · 5).

 "Developing Teaching Skills in Physical Education". Mountain View. CA: Mayfield
 Publishing Company
- ۱°-**Siedentop, D. Tannehill:** (۲۰۰۰). Developing Teaching skills in physical education. ⁵th ED. California. Mayfield.