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The Impact of an Electronic Application to Develop the Training Skill of Wrestling Coaches in Wasit Clubs

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ABSTRACT

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: has taken a large space in all areas of life, and one of these fields is the sports field, especially in the field of sports training, so the exploitation of modern technologies by sports event coaches is very necessary to develop their training skills to serve the achievements they achieve, so the research aims to prepare an electronic program according to artificial intelligence techniques and identify the impact of that program on the training skill of wrestling coaches in Al-Kut Center, and the researcher assumes that there are significant differences in the pre- and post-test of the members of the sample The research community and its sample were identified by the coaches of the wrestling game in the clubs of Al-Kut Center, which are (6) coaches, for six clubs specialized in the game of wrestling, while the survey sample was selected by the researcher (2) coaches, and the researcher conducted homogeneity of the research sample in the variables of age, age and training. After identifying the research variables, the researcher interviewed a number of experts and specialists in the game of wrestling to determine the appropriate test for them. Then the researcher started to conduct an exploratory experiment to identify the obstacles that may occur during the application of the main experiment, and then the researcher conducted the pre-test and after obtaining the results of the test, he began to apply his main experiment for (8) weeks, which included (24) training sessions during the days (Sunday, Tuesday, and Thursday). The session time was (45) minutes. After the end of the specified period, the researcher applied the post-test, taking into account the conditions in which the pre-test was conducted. After obtaining the results, the researcher put the results of the tests in the statistical bag to extract the research results. After analyzing and discussing the results, the researcher concluded that the electronic program has an important role in developing the perceptions of coaches regarding training skills, and the electronic program according to artificial intelligence contributed to providing coaches with information related to the field of sports training. The researcher recommends activating the role of electronic technologies in training work, and conducting electronic programs supported by artificial intelligence in other events.

Keywords:
Training Program - Artificial Intelligence .- Training Skills

1- Introducing the research

1-1 Introduction and Importance of the Research:

The science of training tends to use modern technologies in employing its capabilities for the purpose of benefiting from these technologies in the development of training programs and training units to benefit from this technology in the speed of delivering information to trainees, so most of the training courses have been provided with these modern means to facilitate the work of the trainer as well as to develop his capabilities in using modern devices to employ his training skills. AI technologies can make a big difference in how each athlete's strengths and weaknesses are identified, through biometric data analysis and performance, and coaches can use electronic software to provide accurate information about overall performance and develop customized training strategies, as these strategies may include programs tailored to the needs and abilities of each athlete, improving training efficiency and achieving better results. The researcher believes that artificial intelligence tools contribute to enhancing the ability to adapt to changes in performance by providing dynamic training plans that change based on the athlete's progress. Recent research confirms that the use of electronic technologies in sports is no longer just a trend, but a necessity to exploit the full potential of athletes.

Tablets are one of the best tools that help the sports coach complete his training task, as they allow them to make informed decisions based on data instead of relying only on paper and pen. Together, they can assess progress and achieve goals more effectively in a highly competitive world like wrestling, and being able to leverage technology is the best step to ensure that sporting achievements and performance are consistently improved.

The game of wrestling is one of the games that needs good skill performance, and because the game of wrestling is suitable for everyone and can meet the needs of all individuals in being practiced in clubs, so the coaches of this game must use modern technologies for the purpose of developing technical performance and physical fitness elements, and the game of wrestling does not need a lot of sports equipment to sustain it, and the individual's feeling that the game of wrestling fulfills his desires to prove his strength over those who descend him makes him feel fun and important, especially They provide weight competitors and do not exclude all individuals and even those with special needs. The wrestling game has many grips that a wrestler must master. Therefore, the importance of the research lies in making a qualitative leap for trainers through the use of modern devices represented by electronic technology to raise their capabilities in their training work through the development of training modules and the establishment of training programs over the years of training.

1-2 Research Problem:

Tablets are one of the latest devices used in daily life and in all fields because of their great importance in facilitating most work-related matters, through the researcher's follow-up of most wrestling coaches, he noticed their use of traditional tools in establishing a training unit or developing a training plan and the like, as well as their lack of use of modern devices in their training programs and their role in delivering information to the wrestler, as well as the role that this technology provides in developing the physical and skill aspects of the wrestler, which achieves Achievement and victory in wrestling matches. Therefore, the researcher proposed to

design an electronic application using modern applications to enable wrestling coaches to develop their capabilities electronically and exploit this thing during their training career. The problem of the research lies in the following question:

To what extent do wrestling coaches benefit from the electronic aspect according to tablets in designing personal training programs and what are the obstacles that limit its effective application in the sports training environment?

1-3 Research Objectives:

1- Designing an electronic application using tablets.
2- Identify the impact of the electronic application on the development of the training skill of wrestling coaches.

1-4 Imposing the Research:

1- There are statistically significant differences in the pre- and post-test of the training skills of wrestling coaches and in favor of the post-test.

1-5 Research Areas:

1.5.1 Human Field: Wrestling Coaches in the Clubs of the Kut Center.
1.5.2 Time Domain: The period from 2025 to 2025.
1.5.3 Spatial Area: Damok Sports Club Hall.

2. Research Methodology and Field Procedures:

2-1 Research Methodology:

The researcher used the experimental method by designing one group to suit the nature of the research problem.

2-2 Research Population and Sample:

The research population was identified as the coaches of the clubs of the center of Wasit Governorate, which are (6) trainers distributed over (6) clubs, as shown in Table (1). The researcher determined the population of his research in the deliberate way, while the research sample was selected through the method of comprehensive inventory of all the clubs of the Al-Kut Center, the researcher found that these coaches are the only ones who practice training this game in the governorate, so the research sample was selected by lottery (4), while the survey sample reached (2), and the researcher conducted homogeneity in the variable of age and training age. The researcher also designed an application similar to the applications used in the mobile phone by a software engineer specialized in this work.

Table (1)
Shows the research community

Reconnaissance	The class he trains	Number of Trainers	The Club	t
	Advanceds	1	Kut	1
	Advanceds	1	Pride	2
	Advanceds	1	Damoc	3
1	Advanceds	1	The two rivers	4
	Advanceds	1	Jihad	5
1	Advanceds	1	The Martyr	6
2	—	6	Total	

2.2.1 Homogeneity of the research sample:

The researcher performed homogenization on the members of the research sample in morphological variables as shown in Table (2).

Table (2)
Shows the homogeneity of the research sample

Torsion	Standard deviation	Broker	The middle	Unit of Measurement	Variables
0.75	1.32	29	30	Year	Age
0.45	1.55	503	6	Year	Training Age

2-3 Methods, devices and tools used in the research:

2.3.1 Means of Information Collection:

The researcher reviewed many scientific sources related to the research topic, as well as the researcher resorted to the international Internet as well as observation.

2.3.2 Devices and Tools:

1- Internet-enabled hall.
2- (6) tablets of (Samsung) type.
3- Stopwatch.
4- Data show.
5- Fully equipped wrestling hall.

2.4 Field Research Procedures:

2.4.1 Identifying the research variables:

The researcher through reviewing many scientific sources and interviewing a number of experts and specialists in the field of sports training in order to identify the training skills that suit the research sample, as the program is modern and related to the electronic aspect for the purpose of employing it in the field of training, so (planning the training unit - training curriculum) was determined.

2.4.2 Defining Research Measurements:

The researcher interviewed a number of experts and specialists in the field of sports training in the game of wrestling, as well as a number of academics specialized in the field of testing and measurement to determine the most important appropriate tests for the members of the research sample. The measurement included (training skill), which is a practical application on the tablets of the application that was designed by the researcher and then evaluated by a number of referees. The researcher designed an application in cooperation with an expert specialized in software engineering [*] This application includes a set of (20) questions and answers to them in the form of choices, which include a set of information related to the field of sports training on how to form a training unit and how to work on planning the training program, as well as a set of questions to identify the extent of information possessed by the members of the research sample, noting that the time to answer these questions is (20) minutes, i.e. one minute for each question.

2.4.3 Exploratory Experiment:

The researcher, in cooperation with the assistant team, conducted an exploratory experiment on a sample of the original population, which are (2) trainers practicing sports training on the category of applicants as mentioned in Table (1), and the purpose of the exploratory experiment was to avoid making mistakes that the researcher may encounter during the main experiment.

2.4.4 Pre-Test:

The researcher conducted his pre-test on the day () of the coincidence () on the research sample, taking into account all the things that contribute to the success of the work, as the tests were conducted in the closed hall of Al-Kut Club at four o'clock in the afternoon in order to provide all the necessary supplies in terms of the display screen and the seating of the testers.

2.4.5 Main experience:

The researcher conducted his main experiment on the day () corresponding to () after providing the tablets by the researcher and equipping them with the training program and by conducting an

[*] Haider Majeed Hneids: Bachelor of Computer Programming, Wasit University, Faculty of Computer Science and Information Technology.

introductory session by the researcher that included the introduction of the program and how to use it on the tablet and the contents of that program related to the field of training, as well as the possibility of creating training units in all its forms and the loads, stresses and rest periods contained in the training unit, with how to distribute those loads. In addition to defining the purpose of the training module with the possibility of dividing the training module into its three sections. The program included everything related to planning sports programs, training curricula, and how to strategize the game he plays. With the possibility of introducing the sports coach to the skills of training and exploiting technology in this aspect. The number of sessions prepared by the researcher reached (24) sessions distributed over (8) weeks, with (three sessions) per week for days (Sunday, Tuesday, and Thursday), where the duration of the session reached (45) minutes. In the last two weeks, the researcher has assigned the trainers that each trainer creates a training module on the tablet and it is displayed on the data show, in front of the trainers, with the possibility of interference by the trained colleagues about the mistakes made by their fellow trainer and correcting it.

2.4.6 Post-Test:

The researcher conducted his post-test on () corresponding to () and under the same conditions as the pre-test was conducted.

2.4.7 Statistical Methods:

The researcher used the Statistical Package (SPSS).

3- Presentation, analysis and discussion of the results:

3-1 Presentation, analysis and discussion of the research results:

After the data were unloaded for the tests (pre- and post-test) of the research group and to verify the validity of the research hypotheses, the data were analyzed statistically as follows:

3.1.1 Presentation and analysis of the results of the differences for the testing of the training experiences (pre- and post-part) of the experimental group:

Table (3)

Shows the arithmetic media, standard deviations, calculated t-value, error percentage, and significance of the pre- and post-test training experience of the experimental group.

Significance of the differences	sig	Calculated value (t)	P.A.	P.S.	Post-testing		Pre-test		Unit of Measurement	Statistical Milestones / Variables
					±	Q-	±	Q-		
Moral	0.000	3.211	1.394	1.65	1.146	18.23	2.54	16.58	Degree	Training Skill

3.1.2 Discussion of the research results:

Through Table (3), it is clear to us that there are significant differences for the members of the research sample in the post-test, and the researcher believes that these differences came as a result of the electronic program prepared by the researcher according to modern techniques and in proportion to the levels of the research sample, as the program added great information that was not included in their perceptions about training and how to work the training plans, as well as the training curriculum and the mechanism of developing it in a way that suits the wrestlers and the various categories, and the program also contributed to the understanding and familiarization of the trainers on how to distribute the loads. Training during the sports season. This program is considered as an expert system that the trainer needs at any time during his training work because it contains a lot of information. This is due to the ability of the technological content that appeared

in the training environment, which helped the research sample to form a huge reservoir of knowledge and find appropriate solutions for the training environment and for different situations, tasks and activities. Wissam Salah et al., 2020: p. 233, points out that "it helps to make information more real, which makes learners able to achieve more quickly. It also enables learners to solve real education problems, as it helps them to imagine, propose, understand and use problems." The AI environment was also able to enhance the capabilities of the research sample and transform their thinking, which is an important factor in developing skills and concepts as a result of the interaction with the content of the program, all of which led to the development of their cognitive flexibility. relational and behavioral theories that an individual changes his behavior when he knows the consequences of his previous behavior" (Shaima Samir and Mohamed Abdullah). This has led to the reinforcing role of the AI environment, which has enhanced the effectiveness of the research sample's empowerment, motivation and self-esteem, and helps them increase their experience and leads them to accomplish training tasks. Since the techniques developed by the researcher aim to increase the experience of the trainers so that each trainer can have the ability to identify the characteristics of the stimuli in more than one way, as well as the ability to generate more than one strategy or tactic to solve the requirements of the situation, and that this ability can be developed through training. The researcher also believes that the improvement that occurred in the research sample members was a result of the diversity of methods in the training program, The possibility of putting it in new images in which the trainee's ability and the stored information he possesses appears, which enhances his positive state that makes him a participant in the training process, and his ability to face problems, thus achieving the desired goals of the training process, which is clearly reflected in the improvement of his cognitive flexibility, as (Rhodes, & Rozell) states that "cognitive flexibility is the ability of the individual to understand the information and concepts that have been absorbed and learned before that in order to produce alternative solutions to new problems." Familiarizing the trainers with these methods in the program has led to the generation of new ideas on how to choose and apply the appropriate method in skills training, which in turn leads to the absorption of a greater number of scientific concepts. The development of mental habits requires trainers to use training methods that help to embody ideas to accommodate them, and they are also related to the stages of cognitive development, and for this reason, the training activities through which they seek to develop mental habits must be appropriate for the cognitive development stage of the trainer. The results showed the improvement of the experimental research sample through the absorption of concepts related to the training field in terms of the method of understanding the physical elements, as the expansion of the number of windows set by the researcher in the training experiences led to the expansion of the perceptions of the experimental research sample and understanding what the training unit needs from its three sections and what each section contains, and taking into account the successful method in training each element of physical fitness, as the ability to apply means that the trainer is able to use his knowledge about When he understands the topic or idea at hand, he is able to apply the vocabulary of that topic well. The researcher observed the interaction of the coaches with this used technology, which led them to insist on knowing many things related to sports training.

We note that the electronic aspect has attracted the attention of trainers, their enjoyment and their integration in learning these things. All of these things contributed to the development of

the conceptual comprehension of the research sample and its various dimensions. The researcher noted that the training program supported by artificial intelligence made the members of the research sample have the ability to analyze, think, summarize and deduce, which led to a noticeable improvement in their experiences.

Since the electronic program contains a huge amount of information related to the basic concepts of sports training, which are the basis for building experiences, the researcher believes that it is difficult to learn any knowledge well without understanding its basic concepts, as the researcher initially noticed the low level of the experimental research sample in receiving information in terms of the lack of information they have about physical abilities and motor abilities and how to separate them. This led the researcher to explain And clarify everything related to these matters. The importance of sports planning is shown to be one of the basic tasks in training, because they do not memorize information without understanding it and applying it in various aspects of their daily life, which helps a lot in increasing the importance of knowledge content and its function in their lives, and clarifying how to plan the training program provides a basis for generating knowledge and helps coaches to solve unfamiliar problems by recognizing the links between concepts and procedures and also helps them avoid many mistakes. The ability of the learner to achieve the training outcomes is affected, as it represents the driving force to participate in learning activities and tasks, perseverance in achievement, and overcoming difficulties in mastering experiences, as the trainer's possession of scientific concepts reduces the amount of effort that the player will exert in facing obstacles, as well as its impact on the amount of effort and anxiety that the player feels during the implementation of the tasks required of him, and the level of achievement they achieve in those tasks. According to Eisenberger, "it affects the ability of the learner to organize his knowledge and experience accurately, choose the appropriate path, monitor and follow up his performance continuously, and overcome difficulties to accomplish the required tasks." The program also contributed to providing clear explanations of scientific phenomena, and facilitated the process of using scientific concepts in new situations. According to Moran& Keeley, educational programs help the learner to reach a scientific concept, enhance his ability to retain long-term memory, quickly retrieve it with his own words, link it to previous experiences and reality, find analogies for it, build mental or physical models that distinguish him, as well as understand the relationships between its elements, and then employ it in situations other than the one he has learned. He also avoids remembering them incorrectly.

4. Conclusions and recommendations

4.1 Conclusions:

1- The e-program plays an important role in developing the trainers' perceptions regarding the electronic aspect.
2- The electronic program contributed to providing trainers with information related to the field of sports training.
3- The use of tablets within the framework of the trainer's work is a qualitative addition for the trainer in overcoming difficulties during his work.

4.2 Recommendations:

1- Activating the role of electronic technologies in training work.
2- Exploiting modern technology in sports training.
3- Conducting electronic programs supported by tablets in other events.

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