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مجلة علمية محكمة تصدرها كلية التربية البدنية وعلوم الرياضة



An Analytical Study of Performance Intelligence Levels of Volleyball Players of Determination

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ABSTRACT

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Keywords:
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- 1- Building and Implementing the Performance Intelligence Scale for Volleyball Players of Determination
- 2- Creating standards and levels of performance intelligence among volleyball players of determination
- 3- Identifying the reality of performance intelligence among volleyball players of determination
- 4- Identifying the Performance Intelligence Levels of Volleyball Players with Determination

Research Sample :

Volleyball players of determination, which number (66) players representing (8) sports clubs.

The most important conclusions:

A player with high performance intelligence is reflected in his performance in matches and training weekends is more positive.

Recommendations:

Adopting the current scale designed by the researcher to reveal the level of performance intelligence among volleyball players (people of determination)

1- Introducing the research:

1-1 Introduction and Importance of the Research:

There is no doubt that there are skills that individuals share, but there are skills in which they also differ, and the level of variation in possessing them is an important indicator of the success of some and the failure of others, and some of these skills are what is apparent, and some of them are not apparent because they are related to the secrets of the human soul.

Intelligence is of great importance that is manifested in all areas of life, including the sports field, like the rest of societies, where the right individual is placed in the right place, and this requires identifying the mental potential of the player in accordance with the requirements of the game performed by the player, especially the volleyball player, as the nature of the game needs a player who enjoys several qualities, including physical, skill, and psychological in addition to performance intelligence. Which is more likely to be able to do better than what is favorable to a team. This is not limited to cognitive potentials, but also includes non-cognitive potentials, represented by emotional skills that have a great role in the success of the player.

The most prominent means that contribute to the development of the physical, mental and social abilities of individuals, especially among people of determination, who represent an important segment of society deserve attention and support. Among the team games that are very popular among the people of determination, volleyball stands out as one of the sports that requires high performance skills, team interaction and the ability to make decisions in dynamic and constantly changing play situations. The concept of "performance intelligence" emerges as one of the important determinants that contribute to the excellence of sports performance, as it refers to the ability to process information, understand play situations, and make appropriate decisions at the right time, thus going beyond physical abilities to include cognitive, psychological, and behavioral aspects. Performance intelligence is particularly important for volleyball players of determination, as their situation poses additional challenges that require special adaptation and effective performance strategies.

Performance intelligence is not just a complement to physical skills, but is a critical factor in determining the quality of motor response, speed of decision-making, the ability to read play situations, anticipate opponent moves, and choose appropriate solutions in milliseconds. These cognitive and behavioral abilities become even more important in athletes of determination, who

often face limitations or challenges that require cognitive and skill compensation, making performance intelligence a key focus in sports performance analysis.

It is worth noting that scientific research and studies in this field are still limited, especially with regard to assessing the levels of performance intelligence among volleyball players of determination in the Arab world. Hence, this research seeks to bridge a knowledge gap, through a systematic scientific study based on accurate measurement tools and meaningful statistical analysis, in order to contribute to the development of training programs, and provide applicable recommendations that support the integration of performance intelligence in training plans, and enhance the competitive performance of these players.

Exploring this aspect can form a basis for developing the concepts of mental and cognitive training in the field of sports for people of determination, in a way that contributes to achieving true sports empowerment and enhances equity in development and competition opportunities in specialized sports environments.

1.2 Research Problem:

The mind is considered a purely human nature and its development is in different stages, and it is responsible for the distinction of man from the rest of living beings, but man himself differs from his fellow human beings in his mental abilities, and among these abilities we find intelligence, which is considered mental energy or mental return, or it is the attribute accompanying the mind that works actively, understandingly, deeply, and quickly, and this is what makes us find intelligence, which is considered mental energy or mental return, or it is the attribute accompanying the mind that works actively and understandably. According to the researcher's knowledge, there is no measure of performance intelligence in the sports field, especially in the game of volleyball, and the researcher hopes through this study to reach results that have positive implications on various aspects of the training work, as the game of volleyball requires speed in performance and a continuous change in the game plans, which requires the presence of a player with a degree of intelligence on the field in various situations as well as training.

1.3 Research Objectives:

- 1- Building and Implementing the Performance Intelligence Scale for Volleyball Players of Determination
- 2- Creating standards and levels of performance intelligence among volleyball players of determination

- 3- Identifying the reality of performance intelligence among volleyball players of determination
- 4- Identifying the Performance Intelligence Levels of Volleyball Players with Determination

1-4 Imposing the Research:

The existence of different levels of performance intelligence among volleyball players of determination

1.5 Research Areas:

- 1- Human Field: Volleyball players of determination
- 2- Temporal Domain: 11 /11 /2024 until 20/3 /2025
- 3- Spatial Field: The closed hall of Al-Samawa Sports Volleyball Club.

3. Research methodology and field procedures.

3-1 Research Methodology.

The researcher used the descriptive method of this survey method to suit the research objectives and the nature of the problem.

3.2 Research population and sample

The goals set by the researcher for her research and the procedures she uses will determine the nature of the sample she will choose (Raysan Khraibet, 1987, p. 41). Accordingly, the research population was deliberately selected from the 66 players of volleyball with disabilities representing (8) sports clubs for the 2024-2025 sports season. The sample was divided into two parts, the first for the design and construction procedures of the scale, and the second for the purpose of applying the scale, as follows:

First: Sample Scale Construction:

This sample included (40) players from volleyball clubs with disabilities participating in local activities and competitions, representing (60.61%) of the research population.

Second: Application Sample:

This sample included (26) volleyball players of determination, and their percentage reached (39.39%) of the research population, and Table (1) shows the details of the distribution of the sample.

Distribution of the research sample of volleyball players of determination

Percentage of Research Population (%)	Number of Players	Sample Type
60.61%	40	Sample Scale Construction
39.39%	26	Sample Application
100%	66	Total

3-3 Research Tools, Devices and Means:**3.3.1 Research Tools:**

"The researcher needs different data to complete his research, and he must choose the appropriate tools for data collection, whether secondary or primary, knowing that there are many data collection tools that the researcher can choose what suits his research" (Fayez Juma Al-Najjar et al., Dar Al-Hamid, 2010, p. 75).

3.3.2 Devices used in the research:

- ❖ Manual Calculator (Genx.
- ❖ Laptop type (HP.

3.3.3 Methods used in the research:

- ❖ Arab and foreign sources and references.
- ❖ International Information Network (Internet).
- ❖ The Assistant Staff (Appendix 1).

3.3 Scale construction procedures

It is "a set of basic steps that can be followed when building a test or scale and how to link the units of the scale to measure the overall aspects of a skill, trait, trait, or ability." (Muhammad Hassan Allawi and Muhammad Nasr al-Din Radwan 2002, pp. 319-320). The researcher sought to build an intelligence scale Performance in line with the scientific foundations from which the topic of Research.

3-4 Scientific Parameters of the Scale.

In order to confirm the safety and science of the construction of the scale and to detect its adequacy, it is necessary to analyze its paragraphs, and here it is necessary to have basic and important conditions to ensure this, and one of the most important of these conditions is its excellence in honesty and consistency. This is what Davidoff confirms, as she points out that "test

designers must evaluate the evidence of the stability and honesty of their instruments (Linda L. Davidoff. (1983, p. 538)

3.4.1 Validity of the scale

The concept of honesty is one of the most important basic concepts in the field of testing and measurement, as the validity of the test is defined as the extent to which the measurement tool is constrained to a specific goal (Marwan Abdel Majeed 1999, p. 43) Honesty is a crucial concept in the field of measurement and is related to whether or not the choice measures what was set to be measured, and the test is honest if it succeeds in measuring the extent to which the goals it was set for, and for the honesty of several types, the researcher has verified the validity of the scale from During :

First: Apparent honesty:

This kind of honesty was achieved when the researcher presented the scale to a group of experts to a group of experts to confirm its validity and estimate the extent to which each paragraph measured the components of each field, and thus the areas and paragraphs that received the approval of experts were accepted. Insincere paragraphs were deleted.

Second: The sincerity of the construction.

It is considered one of the most suitable types of honesty for the construction of scales, and it is called the truthfulness of the concept or the truthfulness of the hypothetical configuration because it depends on the empirical verification of the extent to which the scores of the paragraphs correspond to the property or concept to be measured, and it means the extent to which the scale is measured, which is the analysis of the scores of the scale based on the construction of the property to be measured in the light of a certain concept (Abdul Jalil Al-Zoba'i (et al.), 1981.

, p. 43) The researcher has verified the validity of the construction in the research scale through indicators that are:

1- The Style of the Two Extremist Groups

The researcher's mechanism was reached by distinguishing the paragraphs in the scale, and this was verified when the discriminating power of the paragraphs was calculated in the method of the two extreme groups, and using the T-test, we find that the distinct paragraphs were extracted and the unmarked paragraphs were excluded.

3.4.2 Internal consistency coefficient:

It is the ability of the scale to track the actual performance of an individual in the area of the trait to be measured¹, and it is known in the construction of the scales that the higher the coefficient of correlation of the paragraph with the total sum, the greater the probability of obtaining a more homogeneous scale (Allen, M, x, yen, w 1979, p, 125). This kind of truthfulness was achieved through the use of Pearson's simple correlation law.

3.4.3 Stability

There are several methods from which we can extract the stability coefficient, and the researcher has chosen the method of retesting. This method is summarized in performing the test on the sample twice separated by a period of time, after which the correlation between the two tests is identified, and the extracted value represents the stability coefficient of the test (Abdul Jalil Al-Zuba'i et al., 1981, p. 43).

For this purpose, the test was re-tested on (6) players from the halls of Al-Ulmiyah and the University, (2) from Basra, (2) from Karbala, and (2) from Nasiriyah. Five days after the first test, the researcher collected the results of the two tests, and extracted the Lieberman correlation coefficient, and the calculated value of (t) (0.91) and the significance level of (0.012) appeared, which indicates the existence of a high correlation, and therefore the existence of a stability coefficient for the scale.

3.4.4 Objectivity.

Objectivity is that the test is not affected by the change of arbitrators, and that the test gives the same results regardless of the meaning of evaluating the test, and this means the exclusion of autonomy, as the more objectivity in the arbitration, the less subjective it is (Muhammad Sobhi Hassanein, 1995, p. 202).

3.5 Final application of the scale.

After completing all the requirements and procedures of the design, the scale is ready for application, so that the total number of its paragraphs has reached (30 items), the scale has been applied in its final form Appendix (2) to the main research sample of (60) players of determination in volleyball for the season 2024-2025.

3-8 Statistical Methods:

(Arithmetic mean, standard deviation, simple correlation coefficient (Pearson))

Test (v) - Percentage Law - Statistical Package (SPSS) Version 16)

4. Present, analyze and discuss the results

4-1 Presentation of the results of the emotional intelligence levels of handball players with disabilities

Table (1)

Shows raw scores, levels, number, and percentage of performance intelligence

Percentage	Issue	Raw Grade	Levels
%20	12	150 -126	Very good
%21,66	13	125 – 102	Good
%26.66	16	101 – 78	Medium
%16,66	10	76 -54	Acceptable
%15	9	53 -30	Weak

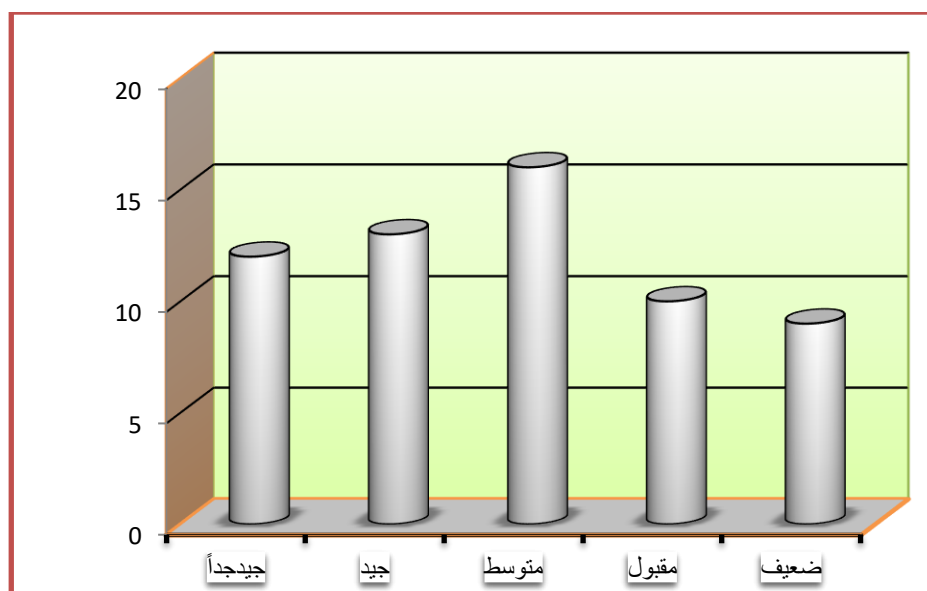


Figure (1)

Shows the levels of the Psychological Fitness Scale

After applying the performance intelligence scale , the researcher obtained several levels, as

shown in Table (1), which represents the levels of the Performance Intelligence Scale, as the level is very good ranges between (126-150), a good level between (102-125), an average level between (78-101), an acceptable level between (54-76), and a weak level that shows (30-30). 53), and it also shows the percentage according to the levels of the Performance Intelligence Scale, as the players who reached a very good level were (12) with a percentage of **(20%)**, and the players who obtained a good level were (13) with a percentage of **(21.66%)**, and those who obtained an average level were (16) and a percentage of (26.66%), and those who obtained an acceptable level were (10) With a percentage of **(16.66%)** and those who obtained a weak level were (9) and a percentage **(10%)** as shown in Figure (1).

The researcher believes that the reason why players get the level of (very good and good) is that performance intelligence is a quality that the player enjoys at different levels, and intelligence is not limited to one individual without another or to a people without other peoples, but it is a dominant thing over all human societies, all types of human beings possess a certain amount of basic abilities, and a certain level in each type of intelligence. Gardner also points out that people have multiple intelligences but to varying degrees, as he explained that The abilities that people possess fall into several things that cover a wide range of human activity in different age groups, and these abilities include (physical motor intelligence), which means the ability of the individual to use his mental abilities related to bodily movements as a whole to express thoughts and feelings, and this intelligence includes specific qualitative skills such as balance, strength, flexibility, speed, and the sensation of body movement and its description (Karen, G Multiple 2002p6)

But the coach has a big role in developing the player's performance intelligence through the psychological preparation of the players, and when they reached this level in performance intelligence, as a group of players, not most of them, were familiar and interested in the period of psychological preparation, psychological preparation would show the best behavior and behavior, as it is characterized by positivity for the player and the team that is well prepared, and it is possible to reach the highest levels through the development of physical, skillful, and planning aspects, in addition to the psychological aspect, which is considered the important and vital aspect. This should not be overlooked by any coach, as a player goes through situations and circumstances in training, especially in competitions full of strength, intensity and excitement, and emotions that need a well-prepared player before training for a period of time before participating in sports races, and it is necessary to plan and organize the number of players psychologically, educationally and physically.

This is confirmed by Kamal Jamil Al-Rabadi (2001), "Psychological numbers allow the athlete to lead himself and overcome the difficulties and problems that are faced, no matter how difficult they are, and the important thing that the coach must do is to develop the will, determination, initiative and independence of the player, and to possess himself at the time of the races, especially when the players participate in them equal in terms of numbers" (Kamal Jamil Al-Rabadhi, 2001, p. 116). As Nahid Rasan Sukkar adds, "There is an effective role played by the coach in digesting and mastering the players' psychological skills, and the coach must clarify the role of psychological preparation in reaching the highest levels... and observing the individual characteristics of each player and thus building his psychological preparation." (Nahid Rasan Sukkar, 2002, p. 74).

The researcher believes that the reason why players get the (average) level, which is higher in terms of the number of players, is to have information related to the psychological aspect that enables him to prepare players psychologically and deal with them correctly for the purpose of reaching them to the higher levels and achieving the best results by helping the players regulate the psychological emotions that they form during training or the match.

Osama Kamel (1997) points out that "a successful coach is not only good at regulating the physical energy of a player by controlling the training loads, but he is also the one who can regulate psychological emotions by helping him to regulate his thoughts and control his emotions, i.e. paying attention to psychological numbers like physical numbers" (Osama Kamel Rateb 1997, p. 7).

The reason for the level (acceptable and weak) of the performance intelligence scale is due to the coach as a result of the importance of his leadership role in the conduct of the training process and directing it towards achieving its goal and objectives effectively, as the coach is responsible for guiding and motivating the players, raising the physical, skillful, planning and psychological level in an integrated manner and providing all the appropriate material and psychological conditions possible for that, and all these responsibilities impose on the coach to have the ability to take responsibility and work accurately, otherwise the negative impact will be on the player, especially The inexperienced player who is more likely to be affected by this condition, as the volleyball player must learn how to behave under any circumstances and in any atmosphere, especially in competition, which requires the player to have good behavior and deal with intelligence on the field inside the field, and here the role of the coach in the training process and his personality is highlighted

Here, Ammar Abdel Rahman points out that "the coach's psychology plays a big role during the training process, which is reflected on the trainees in particular, and therefore the coach must have the highest degree of psychological discipline in the most difficult and accurate cases, and the emotion is matched by calmness, fanaticism, stubbornness with patience, anger with tolerance, and in the case of the opposite, and the coach's feeling of the emotions of the players themselves, this creates a kind of sensitivity and psychological tension among the players (Ammar Abdel Rahman Qaba, 1999, p. 32).

Conclusions and recommendations

5.1 Conclusions:

In light of the results of the current research, the following conclusions can be drawn:

- 1- Building and implementing a scale for performance intelligence for volleyball players of determination was reached
- 2- The research sample was distributed at five levels: (Very Good - Good - Medium - Acceptable - Weak).
- 3- A player with high performance intelligence is reflected in his performance in matches and training and is more positive.

5.2 Recommendations:

- 1- Adopting the current scale designed by the researcher to reveal the level of performance intelligence among volleyball players (people of determination).
- 2- The need to emphasize the positive psychological state of the players and work to create the appropriate atmosphere for the development of this state in order to serve performance.
- 3- Studies related to performance intelligence can be conducted in various sports activities for people of determination.

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Attachment (1)**Assistant Team**

Workplace	Name	t
Muthanna University / Faculty of Physical Education and Sport Sciences	Prof. Dr. Oras Neama Hassan	1
Open Educational College / Muthanna Academic Center / Department of Physical Education	Eng. Dr. Mukhlad Abdel Khader Khasaf	2
General Directorate of Education of Muthanna / Physical Education Teacher	Eng. Dr. Waleed Khaled Razeej	3

Attachment (2)**The Scale in its final form**

At all	Rarely	Sometimes	Probably	All the time	Paragraphs	t
					I can show how I feel in different situations.	1
					I know how my emotions affect my performance in the game.	2
					I can know the strengths and weaknesses of my personality	3
					I have a sense of fun and humor in all situations.	4
					I don't accept to be defensive by receiving other people's opinions on my game.	5
					I make the choices I have in training opportunities to learn and expand my experience.	6
					I feel confident when there is no supervision by the coach.	7
					I do what I believe in, even if others don't agree with me.	8

					I want to be better in the team that I play.	9
					I act calmly in difficult and complex situations in a match.	10
					I work to calm others down in tense situations in training and during play.	11
					I face the immoral actions of others with good behavior	12
					My principles and values allow me to admit my mistakes to others.	13
					I work to change my opinions and thoughts as soon as there is evidence to the contrary.	14
					I find myself comfortable with others even in situations of anger and nervousness	15
					I seek to apply procedures and routines in training with high flexibility.	16
					I have standards and standards for others through which I build relationships with team members.	17
					I work with the possible instead of waiting to study impossible options while playing.	18
					I see things from the perspective of others and understand their behaviors.	19
					I am not prepared to understand the values, customs and traditions of others within the team.	20
					I deal responsibly with the problems of the players	21
					I raise enthusiasm among the players and make the training always exciting.	22
					I work to encourage the players to train and play by explaining the power of the task entrusted to us.	23
					I use different methods to persuade and influence players.	24
					My outlook on life is full of optimism	25

					When I hear inappropriate words, I feel unable to complete the match	26
					I don't think I have enough ability to control the direction in which I performed in the match	27
					My dependence on fate in my athletic performance	28
					What will happen in my sporting future will depend on what I plan for today	29
					I behave correctly even if no one is watching me	30