Kurdish Studies

Jan 2024

Volume: 12, No: 1, pp. 3303-3316

ISSN: 2051-4883 (Print) | ISSN 2051-4891 (Online)

www.KurdishStudies.net

Received: October 2023 Accepted: December 2023 DOI: https://doi.org/10.58262/ks.v12i1.236

Examining the Correlation Between Psychological Traits and Performance Dimensions in Wheelchair Basketball World Championships (IWBF UAE 2023)

Dr. Majed Saleem El-Saleh*1, Dr. Shirin Abdallah Alimour², Dr. Mastur Rehim³, Dr. Dina Tahat⁴

Abstract

This study aimed to identify the psychological characteristics of wheelchair basketball players and their relationship to the dimensions of athletic excellence. The researcher used the descriptive approach with its survey method, the study was conducted on the wheelchair basketball players teams who are officially registered in Wheelchair Basketball World Championships (IWBF) Dubai-UAE 2023, and they were chosen randomly. The sample of the study consisted of (42) men players who represented (4) Teams, where the sample represented (22.7%) of the original study community, and who the study tool was distributed to, where (the scale of psychological characteristics and skills tests) and (the scale of the orientation towards the dimensions of athletic excellence) were distributed. After collecting and statistical analysis of the data, it was found that there is a strong relationship between the psychological characteristics and skills of the individuals in the sample and the dimensions of athletic excellence, as they were all in the middle limits. Likewise, there is no significant relationship between the three dimensions (the orientation towards self-control, the orientation towards a sense of responsibility, the orientation towards respecting others to the sports excellence scale) and the dimensions of psychological characteristics and skills under study. With the exception of the ability to visualize, self-confidence, the ability to relax and motivate sports achievement. The researcher recommended that trainers and workers in the field of sports training should pay attention to psychological characteristics and skills and the dimensions of athletic excellence as one of the success factors to achieve the best sports results, and compensating the role of the psychological specialist in the absence of it.

Keywords: wheelchair Basketball, Players, Sport Psychological, Psychological Characteristics, Psychological Skills, Excellence Dimension.

Introduction

Wheelchair basketball (WB) is a highly popular sport among individuals with disabilities and is played competitively in nearly a hundred countries, boasting a participant count of around 30,000. Over the past few years, there has been an increased awareness and appreciation for

¹ College of Education, Humanities and Social Sciences, Al Ain University, UAE, * Corresponding Author: Email: Majed.Elsaleh@aau.ac.ae Orcid: https://orcid.org/0000-0003-0241-5907

² College of Education, Humanities and Social Sciences, Al Ain University, UAE, Email: shirin.alamoor@aau.ac.ae Orcid: https://orcid.org/0000-0003-3296-5272

³ College of Education, Humanities and Social Sciences, Al Ain University, UAE, Email: Mastur.rehim@aau.ac.ae Orcid: https://orcid.org/0000-0002-0597-8767

⁴ College of Education, Humanities and Social Sciences, Al Ain University, UAE, Email: Dina.Tahat@aau.ac.ae Orcid: https://orcid.org/0000-0002-3331-5274

. . .

the sport among spectators, leading to the emergence of numerous organizations dedicated to its promotion. Moreover, there has been significant progress in understanding the physical training and coaching methods specific to wheelchair basketball, along with the development of a comprehensive classification system for athletes (Fiorilli et al, 2013). The International Wheelchair Basketball Federation (IWBF; www.iwbf.org) serves as the governing body for wheelchair basketball, responsible for establishing the Official Wheelchair Basketball Rules, the Official Wheelchair Basketball Player Classification Handbook, and defining the equipment and facility specifications. Additionally, the IWBF enforces internal regulations to govern the conduct of the Federation (Perreault & Vallerand, 2007) (Soylu et al, 2021).

Sports psychology is a crucial field that plays a significant role in maximizing the performance of teams and individual athletes before, during, and after competitions. It complements the physical, skill-based, and strategic training provided by coaches by focusing on psychological preparation. Research in sports psychology examines various psychological phenomena, such as anxiety, fear, emotional arousal, and emotional balance, and their impact on athletic achievement. The findings indicate that psychological factors can have both positive and negative effects on sports performance. In particular, they can enhance performance among young athletes by increasing psychological energy, helping them cope with anxiety, and cultivating other desirable traits (Fay et al, 2013) (Shaybani and Faddan, 2019). Basketball is a sport that entails intense physical exertion, which places significant psychological pressure on players, particularly during major tournaments and critical matches.

The Study Problem and its Importance

Athletes are subjected to various psychological factors before, during, and after matches, which can vary depending on the type of event and its execution. Basketball, being a sport that demands speed, a positive attitude, and precision, creates immense pressure. The focus on ball possession, timing attacks, accurate passing, and shooting further intensifies this pressure, ultimately impacting the players' performance.

Comparing athletes with and without disability is a common practice within sport psychology research for individuals with a disability. Such a comparison is often justified by the idea that athletes with a disability differ from athletes without disability in that they "have had a major life trauma, loss, or chronic situation to which they have had to adjust" (Vallerand & Rousseau, 2001). Implicitly, such a statement suggests that wheelchair athletes may have acquired coping skills via years of therapy and, consequently, have superior psychological skills and motivation as compared to athletes without disability because these transferred into the sport environment (Amiot et al, 2004).

The researcher's experience and involvement in basketball, particularly with many clubs & university teams & Wheelchair Basketball league, revealed a lack of attention to the teams' psychological state. Their performance remained modest and fell short in many aspects. Notably, the researcher also observed distinct psychological characteristics and skills among individual players and the team as a whole. Consequently, this study aims to explore the correlation between these psychological factors and dimensions of athletic excellence.

Objectives of the Study

1- Identifying the differences between the dimensions of the (characteristics, psychological skills and dimensions of athletic excellence scales) among Wheelchair Basketball World

- Championships (IWBF UAE 2023).
- 2- Knowing the relationship between psychological characteristics and skills and the dimensions of excellence for Wheelchair Basketball World Championships (IWBF UAE 2023).

Domains of Study

The human domain: wheelchair basketball players (16) Team for Men. Spatial domain: Sports halls where basketball games are held. Temporal domain: 9/6/2023 - 30/6/2023

Study Approach

The researcher used the descriptive approach using the survey method, as it suits the study objectives.

Sample and Community of the Study

The study sample consists of (42) wheelchair basketball players for men who are officially registered in the Statements of the World Championships (IWBF UAE 2023). and with a rate of (22.70%) from the original study community, and Table No. (1) (Explains the study sample.

Table (1): Sample and Community of the Study.

Teams	Study Sample	Percentage
UAE	9	75%
Iraq	5	41.6%
Egypt	7	58.3%
Iran	5	41.6%
Australia	4	33.3%
Great Britain	3	25%
Brazil	1	8.3%
Canada	3	25%
Italy	2	16.66%
Netherlands	3	25%
Total	42 / 185	22.70%

Study Tool

- Paper-based and electronic questionnaire.
- Personal interviews.
- Using the scale of psychological characteristics and skills.
- Using the athletic excellence dimensions scale.

Psychological Characteristics and Skills Scale

A psychological assessment tool aimed at evaluating important mental aspects of athletic performance was developed by Bill, John Benson, and Christopher Shambrook. Muhammad Allawi (2003) referenced and modified this tool, which is outlined in Appendix (1). The tool comprises six dimensions: the ability to visualize, the ability to relax, the ability to focus attention, the ability to cope with anxiety, self-confidence, and motivation for athletic achievement. It consists of a scale with 24 statements, with each dimension represented by four phrases. Participants rate their level of agreement or disagreement with each statement. The scale ranges from a minimum score of 4 to a maximum score of 24. Scores that approach or

exceed the hypothetical average are of particular interest =

Number of Paragraphs X Number of Total Alternatives Number of Total Alternatives

In addition, the number of alternatives is (14) for each dimension whenever it is distinguished by the feature this dimension measures, and the lower its degree, this indicates its need to acquire more training on mental skill that this dimension measures.

Measuring the Orientation towards the Dimensions of Athletic Excellence

This scale assesses three dimensions in addition to the overall degree, which comprises 54 paragraphs indicating an individual's general orientation towards sports and athletic excellence. The specific dimensions measured include the orientation towards self-control, the orientation towards a sense of responsibility, and the orientation towards respecting others (see Appendix 2). Originally developed by Donald Del, the scale aims to gauge one's inclination towards sports competition and various aspects related to athletic excellence. Allawi et al (2003) quoted and made modifications to several paragraphs. Participants respond to each paragraph by indicating their orientation on a five-point scale for positive statements: strongly agree (5), agree (4), unsure (3), disagree (2), and strongly disagree (1). Negative statements are rated as follows: strongly agree (1), agree (2), unsure (3), disagree (4), and strongly disagree (5).

Exploratory Experience

The researcher conducted the exploratory experiment on 15/11/2022 on (4) players in order to determine the validity of the tools that the researcher used in the tests, the time taken for the test, and the obstacles that the researcher can face during the study.

Scientific Foundations of the Scale, Validity and Reliability of Performance

The reliability of the study tool, consisting of two scales, was established through a rigorous process involving transparency and submission to a committee of arbitrators and experienced sports psychology experts within the university. They collectively agreed on its validity with a high level of consensus, reaching (95%). To ensure the stability of the tool, the Test-re-Test Reliability method was employed on a separate exploratory sample, comprising six players who were excluded from the main study. These players were retested using the same tool after a week. The correlation coefficient was calculated using the Pearson equation, which revealed a relatively high value of (0.88), indicating a strong degree of correlation between the first and second applications. This information is presented in Table (2).

Table (2): Shows the Stability Coefficient Values for the Scales of Psychological Characteristics and Skills, and the Orientation Towards the Dimensions of Athletic Excellence.

Т	Psychological Characteristics And Skills	Stability T		Orientation Towards Athletic Excellence Dimensions	Stability
1	Ability to visualize	0.84	_ 1	Orientation towards self-control	0.85
2	Ability to relax	0.87	- 1	Offentation towards sen-control	0.03
3	Ability to focus attention	0.85	_ 2	Orientation towards responsibility	0.87
4	Ability to cope with anxiety	0.86		Offentation towards responsibility	0.07
5	Self-confidence	0.85	3	Orientation towards respecting	0.84

6	Motivating of athletic achievement	0.87	others
---	------------------------------------	------	--------

Main Experience

The form was distributed to the players and some were sent electronically to the players with the help of some team coaches between 10/6/2023 - 15/6/2023. Then the forms of the two scales with the results were collected and statistically processed.

Statistical Means of Study

The Researcher Used the Statistical Methods and Processing Necessary for the Study

- *Arithmetic average.
- *Standard deviation.
- *The hypothetical mean.
- * Simple correlation coefficient (Pearson).
- * One-sample (T) test.

Table (3): Shows the Presentation, Analysis and Discussion of the Results of Identifying Psychological Characteristics and Skills.

Psychological Characteristics and		Standard Deviation	Hypothetic Al Mean	Sample		Significance
Skills Dimensions	merages	Deviation	TH TITCUIT	Calculated	Tabular	
Ability to visualize	18.412	2.911	_	0.91		Not Significant
Ability to relax	16.519	2.654		1.55		Not Significant
Ability to cope with anxiety	14.649	3.466	14	0.26		Not Significant
Ability to focus attention	14.52	2.730		0.6	1.98	Not Significant
Self-confidence	16.201	3.431		0.73		Not Significant
Motivation to athletic achievements	15.7230	3.386		0.16		Not Significant
Total Dimensions	96,114	9.296	42	42 1.34		Not Significant

Table (T) Value = (1.98) at the Error Rate $\leq (0.05)$ and the Degree of Freedom (41)

Psychological characteristics and skill sof
Whoolchair Rackethall Players

Ability to
visualize Ability
to relax
Ability to cope with

Figure No. (1) A Graph Showing the Results of Identifying the Psychological Characteristics and Skills.

Under Study for the Individuals in the Sample

Table (3) and Figure (1) show us that the arithmetic mean for the dimensions of the psychological characteristics and skills scale is close to the hypothetical mean or slightly larger, whereas the scores for the "T" test for all dimensions were less than the tabular and are (1.98) and thus the dimensions were not significant. In addition, in the overall scale score, the calculated (T) test showed less than the tabular score.

As shown by the results, no significant differences emerged, and the researcher attributes this to the fact that the scores were close to the hypothetical mean or slightly higher, meaning that the players are at a mid-level and need training in psychological characteristics and skills.

Where Akmoğlu & Kocahan (2017), Ratib (2000) and Vanlandewijck et al (2003) see that training psychological characteristics and body mussels and skills is appropriate for athletes with different ages or levels, as well as that the players need the greatest preparation and psychological guidance that helps them to overcome what they feel from any pressure of training or competition pressure. In addition to that, they have not yet reached the degree that enables them to control their psychological state and direct it to the right direction because of the age level of the players and the lack of experience they have in competitions, and this is what Yassin (2008), Perreault & Vallerand (2007) & Soylu et al (2021) pointed to.

Table (4): Shows the Presentation, Analysis and Discussion of the Results to Recognize the Orientation Towards the Dimensions of Sports Excellence.

The Dimensions of the Orientation Towards	Arithmetic	Standard Deviation	Hypothetical Mean	T Test fo		Significance
the Athletic Excellence	Average	Deviation	Mean	Calculated Tabular		
Orientation towards self- control	54.791	5.417		0.43		Not Significant
Orientation towards responsibility	53.108	4.741	54	0.12	- 1.98	Not Significant
Orientation towards respecting others	52.979	7.261		0.22	1.96	Not Significant
Total dimensions	160.888	13.796	162	0.27		Not Significant

Table (T) Value = (1.98) at the Error Rate $\leq (0.05)$ and the Degree of Freedom (41).

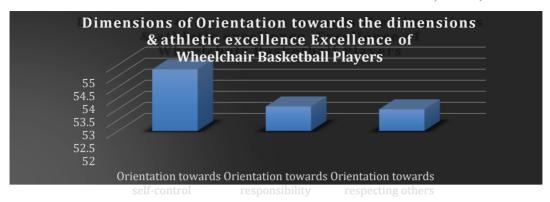


Figure No. (2) A Graph Showing the Results of Identifying the Orientation Towards the Dimensions of Athletic Excellence Under Study for the Individuals in the Sample.

Table (4) and Figure (2) show us that the arithmetic mean of the dimensions is the measure of the orientation towards the dimensions of athletic excellence close to the hypothetical mean or slightly less, whereas the degrees calculated for the "T" test for all dimensions were less than the tables and they are (1.98) and thus the dimensions were insignificant, the overall scale degree also came to the calculated test (T) less than the tabular score. The results show that no significant differences emerged, and the researcher attributes these results to the fact that the scores were close to the hypothetical average or just below, meaning that the players are at an average level and need training in orientation towards the dimensions of athletic excellence. The arithmetic circles of the dimensions are close to the hypothetical average, which means that the sample team players need to train on the orientation of the dimensions of athletic excellence that work on developing and improving the psychological state of the players, as practicing any athletic activity, from the psychological point of view, requires many psychological requirements, so that the individual can properly respond to changing situations during the practice of sports activity and adapting himself to the suitability of the positions and his level and effectiveness are determined accordingly, whether in training or sports competitions. Where these results are consistent with the results of the study (Ali, 2006) (Seron et al 2019) (Al-Shaibani and Faddan, 2019) as well (Fay et al 2013).

Table (5): Shows, Analyzes and Discusses the Results of the Relationship Between the Dimensions (Characteristics and Psychological Skills) and (Dimensions of the Orientation Towards the Dimensions of Athletic Excellence).

Dimensions of	Orientation Tow	nce	
Psychological Characteristics and Skills	Orientation Orientation Towards Self- Towards a Sense of Tow		1 0
	control	Responsibility	Others
Ability to visualize	0.114	.223(*)	0.058
Ability to relax	0.096	0.024	.311(**)
Ability to cope with anxiety	0.173	0.010	0.056
Ability to focus attention	0.111	0.075	0.097
Self-confidence	0.155	.282(**)	0.149
Sports achievement motivation	0.081	0.157	.371(**)

Based on the findings presented in Table 5, it is evident that there is no statistically significant Kurdish Studies

. . .

relationship (at a significance level of 0.05) between the dimension of (orientation towards selfcontrol) in the scale measuring orientation towards athletic excellence and the dimensions of psychological characteristics and skills such as (ability to visualize - ability to relax - ability to face anxiety - ability Focus on attention - self-confidence - motivation of sports achievement) which did not achieve a moral correlation. The researcher explains this because of the low degree of dimensions of psychological characteristics and skills on the one hand, and the intermediate and converging degree of distance for the orientation towards self-control (to go towards the dimensions of athletic excellence) on the other hand for club teams, which indicates that this dimension must be given in particular a major role and importance in the process of psychological preparation missed by coaches in their training units, because of its significant impact on the player's behavior and performance on the field, and that psychological preparation helps in the process of "searching for reasons that affect the player and then reach the optimal way to perform the players through specific mechanisms for adapting and modifying the behavior in a way that positively contributes to reaching the highest levels of performance, whether on the short or long term level (Mahmoud, 2003) (Hamada, 2008) Soylu et al (2021). It is also clear from Table No. (5) that there is no significant relationship at a level (0.05) between the dimension (orientation towards a sense of responsibility) for the scale of orientation towards the dimensions of athletic excellence and the dimensions of psychological characteristics and skills (the ability to relax - the ability to face anxiety - the ability to focus attention Motivation of sports achievement), it did not achieve a significant relation. Except two dimensions, two dimensions of psychological characteristics and skills, namely (ability to visualize - self-confidence). The researcher attributes this to the low degree of dimensions of psychological characteristics and skills on the one hand and the intermediate and converging degree of the dimension of orientation towards self-control (to go towards the dimensions of athletic excellence) on the other hand except for the dimensions (the ability to visualize - selfconfidence), which was significant among the dimension's psychological characteristics and skills. The researcher believes that this dimension (the ability to visualize) is used by the player through the evocation of images in his mind, where each player in his mind invokes events, experiences and previous positions used in this all his different senses in addition to all his experiences, emotions and feelings.

da Silva et al (2017) notes that active mental visualization to perform certain skills results in muscle activity, which may be specific, but its benefit is clear in strengthening the nerve pathways of nerve signals sent from the nervous system to these working muscles. wheelchair basketball players who try to master the shooting skill need to perform this skill dozens of times in training and competition, and it thus strengthens and supports the nerve pathways that control the direction of the muscles responsible for performing the skill, and visualization is one of the ways that work to support these nerve pathways, the player by evoking the mental image of the skill in an orderly manner that leads to participate effectively to the muscles of the body in this performance skill (Hamada, 2008) (Osama Ratib 2000). The self-confidence dimension has a big role, and this is confirmed by the results of both Yassin (2008) and Soylu et al (2021) study which indicated that self-confidence is an important characteristic and skill in the sports field due to its impact on the performance of players and that the athlete's confidence in his abilities is a positive source important to achieve positive psychological energy and thus better performance.

It is also clear from Table No. (5) That there is no significant relationship at level (0.05) between the dimension of orientation towards respecting others to the scale of orientation towards the dimensions

of athletic excellence and the dimensions of psychological characteristics and skills (the ability to visualize - the ability to face anxiety - the ability to focus attention - Self-confidence), did not achieve a significant relation. Except with two dimensions of psychological characteristics and skills, namely (ability to relax - motivation of athletic achievement). The researcher believes that this is due to the low degree of dimensions of psychological characteristics and skills on the one hand, and the intermediate and converging degree of the dimension of orientation towards self-control (to go towards the dimensions of athletic achievement) on the other hand except for the dimension (ability to relax - the motivation of athletic achievement). In addition, the presence of a significant positive relationship between the ability to relax and after the orientation towards self-control. This is what many scholars have pointed out through their studies of a positive relationship through the importance of relaxation, whereby an individual can direct his attention to the work he will do, that is, in the case of relaxed attention.

It also differs with the results of the Cavedon study (2015) and da Silva et al (2017). That the mind cannot be anxious in a relaxed body, as it is difficult for the individual to be nervous and tense if one part of his body is completely relaxed, meaning that the nervousness and tension of muscles and involuntary organs can be reduced if the muscles are in a state of relaxation.

Since increasing the ability to relax leads to reducing the effect of stress response and helping to reach the optimal level of tension and preventing the accumulation of nervous pressure by working to reach a low level of tension and reaching a degree of deep relaxation in which the level of tension is lower than the basal level and this is what was confirmed by Soylu et al (2021). This is what wheelchair basketball players need, as this helps them to raise their morale and improve the level of performance and thus achieve winning, and it is consistent with what was indicated by both (Veeger et al,2012) (Fiorilli et al, 2013) (Katame and Adas, 2002).

The findings indicate a significant positive relationship between the motive for athletic achievement and the dimension of orientation towards self-control. This suggests that the psychological skill of motivation for athletic achievement, which is a key attribute of the wheelchair basketball players under study, is influenced and connected to various motivating factors such as determination, perseverance, discipline, conscientiousness, as well as responsibility and leadership (Veeger et al., 2012; Mahmoud, 2003; Al-Shaibani & Fedan, 2019). In wheelchair basketball, which is a highly competitive sport aiming for the highest level of performance at both individual and team levels, players must possess these motivating qualities to attain the required level of achievement. This emphasizes the significance of motivation for athletic achievement as a distinct psychological skill that is closely linked to wheelchair basketball players and their contribution to sporting success. These findings are consistent with previous studies conducted by Cavedon et al. (2015) Vanlandewijck et al. (2004), Abdel Reda (2002), Soylu et al (2021) who examined elite players through objective observations, personal interviews, and research, revealing the presence of distinctive psychological characteristics and attributes in high-level athletes.

Conclusions

Through presenting and discussing the results of the study, the researcher concluded the following:

- 1. The dimensions of athletic excellence, within moderate limits, showed a strong correlation with the psychological characteristics and skills of the sample members.
- 2. No significant correlation was found between the self-control orientation dimension of

. . .

- the athletic excellence scale and the psychological characteristics and skills being examined.
- 3. Except for the ability to visualize and self-confidence, there was no significant correlation between the orientation towards a sense of responsibility dimension of the athletic excellence scale and the psychological characteristics and skills under study.
- 4. With the exception of the ability to relax and motivate athletic achievement, there was no significant correlation between the orientation towards respecting others dimension of the athletic excellence scale and the psychological characteristics and skills under study.

Recommendations

Through the study's findings, the researcher recommends the following:

- 1- It is essential for trainers and professionals in the field of sports training to prioritize psychological characteristics, skills, and dimensions of sports excellence as crucial factors for achieving optimal sports results.
- 2- The utilization of a sports psychologist and establishing effective coordination between the psychologist and the coach is imperative for the success of the training process.
- 3- In the absence of a sports psychologist, coaches or technical staff should assume the role by developing the necessary characteristics, psychological skills, and orientation towards the dimensions of athletic excellence specifically tailored for wheelchair basketball players.
- 4 Coaches must prioritize understanding the strengths and weaknesses of their players, closely monitor their progress, and continuously evaluate their performance, whether during training sessions or competitive matches, while considering their age and skill level.
- 5- It is recommended to conduct similar studies on players from different sports disciplines to identify their unique psychological characteristics, skills, and orientation towards dimensions of sports excellence, enabling comparisons between different activities & gender.

References

- 1. Abdel-Reda, Essam Mohamed, (2002), psychological security and its relationship to the level of emotional arousal among basketball players (Master Thesis, University of Mosul, College of Physical Education.
- 2. Akınoğlu, B., & Kocahan, T. (2017). Characteristics of upper extremity's muscle strength in Turkish national wheelchair basketball players team. Journal of exercise rehabilitation, 13(1), 62. DOI: 10.12965/jer.1732868.434.
- 3. Ali, Azima Abbas, (2006), Competitive Behavior and Its Relationship with the Orientation towards
- Allawi, Muhammad Hassan and Abd al-Rahman, Kamal al-Din and Abbas, Imad al-Din, (2003), Psychological preparation in handball (theories - applications), The Book Center for Publishing, Cairo, Egypt.
- 5. Amiot, C.E., Gaudreau, P., & Blanchard, C.M. (2004). Self-determination, coping, and goal attainment in the context of a sport competition. Journal of Sport & Exercise Psychology, 26, 396-411.
- 6. Cavedon, V., Zancanaro, C., & Milanese, C. (2015). Physique and performance of young wheelchair basketball players in relation with classification. PloS one, 10(11), e0143621.
- 7. da Silva Santos, S.; Krishnan, C.; Alonso, A.C.; Greve, J.M.D. Trunk Function Correlates

- Positively with Wheelchair Basketball Player Classification. Am. J. Phys. Med. Rehab. 2017, 96, 101–108. DOI: 10.1097/PHM.000000000000548.DOI: 10.1080/02640410310001655750.DOI: 10.1371/journal.pone.0143621.
- 8. Fay, K., Breslin, G., Czyż, S. H., & Pizlo, Z. (2013). An especial skill in elite wheelchair basketball
- 9. Fiorilli, G., Iuliano, E., Aquino, G., Battaglia, C., Giombini, A., Calcagno, G., & Di Cagno, A. (2013). Mental health and social participation skills of wheelchair basketball players: a controlled study. Research in developmental disabilities, 34(11), 3679-3685.
- M. J. (2019). Improving mobility performance in wheelchair basketball. Journal of sport rehabilitation, 28(1), 59-66. DOI: 10.1123/jsr.2017-0142.
- 10. Mahmoud, Nabila Ahmed, (2003), the distinctive psychological skills of basketball players and their relationship to athletic motivation features, International Academy of Sports Technology (IUSST), Sweden, 2003.
- 11. Perreault, S., & Vallerand, R. J. (2007). A test of self-determination theory with wheelchair basketball players with and without disability. Adapted Physical Activity Quarterly, 24(4), 305-316.
- players. Human movement science, 32(4), 708-718.
- 12. Qattami, Youssef and Adass, Abdel Rahman, (2002), General Psychology, 1st floor, Dar Al-Fikr for Printing and Publishing, Cairo, Egypt.
- 13. Ratib, Osama Kamel, (2000), Training of psychological characteristics and skills, Dar Al-Fikr Al- Arabi, Cairo, Egypt.
- 14. Seron, B.B.; Oliveira de Carvalho, E.M.; Greguol, M. Analysis of Physiological and Kinematic Demands of Wheelchair Basketball Games-A Review. J. Strength Cond. Res. 2019, 33, 1453–1462. DOI: 10.1519/JSC.0000000000003069.
- 15. Shaibani, Laila, Faddan, Siham, (2019), Psychological skills in exercising sports activity among young people, Journal of Social Sciences, No. (8), Volume (2), March 2019.
- 16. Soylu, Ç., Yıldırım, N. Ü., Akalan, C., Akınoğlu, B., & Kocahan, T. (2021). The relationship between athletic performance and physiological characteristics in wheelchair basketball athletes. Research Quarterly for Exercise and Sport, 92(4), 639-650. DOI: 10.1080/02701367.2020.1762834.
- the Dimensions of Sports Excellence for Young Basketball Players (Journal of Physical Education, University of Baghdad, Volume XV, Second Issue, 2006).
- 17. Vallerand, R.J., & Rousseau, F. L. (2001). Intrinsic motivation and extrinsic motivation in sport and exercise: A review using the hierarchical model of intrinsic and extrinsic motivation. In R. Singer, H. Hausenblas, & C. Janelle (Eds.), Handbook of sport psychology (2nd ed., pp. 389-416). New York: John Wiley & Sons.
- 18. Vanlandewijck YC, Evaggelinou C, Daly DJ, Van Houtte S, Verellen J, Aspeslagh V, et al. Viewpoint Proportionality in Wheelchair Basketball Classification. Adapt Phys Activ Q. 2003; 20: 369–380. DOI: https://doi.org/10.1123/apaq.20.4.369.
- 19. Vanlandewijck, Y. C., Evaggelinou, C., Daly, D. J., Verellen, J., Van Houtte, S., Aspeslagh, V., ... & Zwakhoven, B & Zwakhoven, B. (2004). The relationship between functional potential and field performance in elite female wheelchair basketball players. Journal of Sports Sciences, 22(7), 668-675. https://doi.org/10.1080/02640410310001655750
- 20. Vanlandewijck, Y. C., Evaggelinou, C., Daly, D. J., Verellen, J., Van Houtte, S., Aspeslagh, V., ...
- 21. Veeger, T. T., De Witte, A. M., Berger, M. A., van der Slikke, R. M., Veeger, D. H., & Hoozemans,
- 22. Yassin, Ramadan, (2008), Sports Psychology, Osama House for Publishing and Distribution, Amman, Jordan.

Appendix 1

Tests of Psychological Characteristics and Skills in Sports

Mental characteristics and skills to measure some of the important mental (psychological) aspects of athletic performance, namely:

- The ability to visualize The ability to relax
- The ability to focus attention. The ability to cope with anxiety
- Self-confidence Motivation of athletic achievement

Instructions

Here are some phrases that may describe your behavior, your direction in athletic competition, athletic training, or sports activity in general.

- It is required to read each phrase very accurately, and to circle any number on the left of the phrase, so that the extent of the application of this phrase indicates your condition.

There are no right and wrong answers because each player differs from the other, but the important thing is to be honest with yourself.

Do not leave any phrase unanswered.

T Phrases	Degree
1 I can clearly visualize any motor skill in my imagination	123456
2 I know how to relax in the sensitive times of a match	123456
3 Many thoughts go through my mind as I play the game and influence my focus	123456
4 I often feel the possibility of being defeated in the competition in which I participate	123456
5 I participate in all competitions and all my thoughts include confidence in myself	123456
Before I participate in the competition, I am mentally prepared to make the utmos effort	t ₁₂₃₄₅₆
7 In my mind, I can visualize my performance of the movements without actually doing them	123456
8 My muscles are tense before I participate in the competition	123456
9 I'm bothered by my inability to focus my attention in the sensitive times of the match	123456
10I am afraid of not being good at playing during the game	123456
11 When the outcome of the match is not in my favor, my confidence in myself decreases as the match is almost over	123456
12I always prefer to participate in sensitive and important matches	123456
13It is difficult for me to imagine in my mind what I would do with my movement	123456
14It is easy for me that I can relax my muscles before taking part in the competition	123456
15My problem is my loss of the ability to focus attention during some match times	123456
16When I enter a competition, I feel more anxious	123456
17Throughout the competition, I can maintain a high degree of confidence in myself	123456
18I can always have fun during the game	123456
19 I always do a visualization of what I will do in the competition that I will participate in.	123456

One of my clear qualities is my ability to calm down and quickly relax myself before taking part in a sports competition.	123456
21Off-field events or noise help distract me on the field	123456
22I get annoyed when I make a few mistakes during the competition	123456
23 I suffer from a lack of confidence in the performance of some of the motor characteristics and skills while participating in the competition	123456
24I always feel like I am doing my best throughout the competition	123456

Appendix 2

A Scale of Orientation Towards the Dimensions of Athletic Excellence

These scale measures three dimensions in addition to the overall degree of the scale that indicates the individual's attitude towards sport in general and towards athletic excellence, and the dimensions of the measurement in the picture are:

- 1 Orientation towards self-control.
- 2- Orientation towards a sense of responsibility. 3- Orientation towards respecting others.

Instructions

Here are some phrases related to some sports situations. You are required to specify in the answer sheet how much you agree or disagree with each phrase in the following image:

- If you strongly agree with the phrase, draw a circle around the number	(1)
- If you agree with the phrase, draw a circle around the number	(2)
- If you cannot decide to approve or disagree, draw a circle around the number	(3)
- If you do not agree with the phrase, draw a circle around the number	(4)
- If you do not strongly agree draw a circle around the number	(5)
T Phrases	Degree
1 It is difficult to combine athletic excellence with academic achievement	1 2 3 4 5
You and the coach could be friends, so that you can call him by his first name, such as friends or colleagues	1 2 3 4 5
During training when the trainer is away from me, I sometimes take this opportunity to joke around with some colleagues	1 2 3 4 5
4 The coach's criticism of you means that he challenges you	1 2 3 4 5
5 It is not the player's responsibility to leave the locker room as arranged	1 2 3 4 5
6 If your team is ahead of the other team, you can relax in the game	1 2 3 4 5
You have the right to be angry if the coach substitutes for another player before proving yourself on the field	1 2 3 4 5
8 The athlete must only undergo a specific diet for the night of the match	1 2 3 4 5
9 If I don't like my team-mate, I ignore him on the field and outside it	1 2 3 4 5
10 The athlete must respect all his coaches	1 2 3 4 5
11 Emotional control reduces player level	1 2 3 4 5
12 Spectators make the player lose his temper	1 2 3 4 5
13 Referees sometimes are the reason of a sports teams defeat	1 2 3 4 5
14 Athletes must know their level of physical abilities	1 2 3 4 5
15 A competitor in play can never be considered as my friend	1 2 3 4 5
16 To be a successful player you must fight others	1 2 3 4 5
17 Insults help to relieve player emotions	1 2 3 4 5
18 The player must severely criticize his teammates	1 2 3 4 5
19 Sports tools that are damaged or broken can be easily replaced	1 2 3 4 5
17	1' 1 0 1'

Kurdish Studies

- If you strongly agree with the phrase, draw a circle around the number	(1)				
Most of the time, the player cannot control his emotions towards hurting his	1	2	3	4	5
A chilled player recordless of his inshillty to control his tempor, in often involved					
A skilled player, regardless of his inability to control his temper - is often involved in matches	1	2	3	4	5
The player who is deliberately trying to hit his opponent is considered a brave					
22 player	1	2	3	4	5
23 A skilled player does have a friendship with a player who has a lower level of play	1	2	3	4	5
24 A good player can control his emotions during nervous situations in a match	1	2	3	4	5
25 Coaches always make unreasonable requests.	1		3		5
26 The player must not make the maximum effort during training	1	2		4	5
27 A successful player only obeys the coach's orders	1	2	3		5
28 A skilled player gets confused when his opponents keep watching him tightly	1	2	3		5
29 An excellent athlete can win the match with little effort	1	2	3		5
30 A person who respects competitors often cannot be a successful athlete	1	2		4	5
31 Patience and restraint are the characteristics of the superior player	1	2		4	5
32 The successful player does not often take care of playing clothes	1	2	3	4	5
When I got low degrees in my studies I ask the coach to try to interfere to improve			5	- '	
my degrees	1	2	3	4	5
34 Referees often count mistakes that I have not made against me	1	2	3	4	5
35 You should play even if you are sick	1	2	3	_	5
36 It is appropriate not to mention the advantages of other players	1		3		5
W/I 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					_
when your playmate gets angry, he must be helped to drop his anger at the competitors	1	2	3	4	5
38 It is a mistake to accept defeat in a good spirit	1	2	3	4	5
The information and theoretical knowledge gained from sports is of great					
39 importance in improving the	1	2	3	4	5
player's level					
40 Successful athlete lose his temper when facing defeat	1	2	3	4	5
Athletes should not attend to study or work daily because they spend more time	1	2	3	4	5
training and participating in competitions.	1		,		
42 If an opponent is quick to anger, I do my best to make him lose control of his	1	2	3	4	5
temper					
43 The player who is easy to provoke is a good player	1	2	3	4	5
44 If the opponent attacks me roughly, I take an appropriate opportunity to attack	1	2.	3	4	5
'' him more roughly		_		•	
45 Coaches must show the mistakes of the players they are training	1		3		5
46 Defeating a team is the responsibility of the coach, not the players	1	2	3	4	5
47 If the coach replaces you with another player, you must clearly demonstrate your	1	2	3	4	5
anger					
48 The player must self-criticize	1	2	3	4	5
49 I enjoy the company of my team mates	1	2	3	4	5
50 When things get tough in competition, they should blame others	1	2	3	4	5
51 If a spectator mocks the player, he must severely stop him.	1	2	3	4	5
52 The player's performance improves when his opponent provokes him	1	2	3	4	5
The player must respect all his teammates. If a spectator mocks the player, he must					
53 severely stop him.	1	2	3	4	5
The player's performance improves when his opponent provokes him			-		_
54 A player must do his best and show his best in matches	1	2	3	4	5