Designing Sports Players' Valuation Indices (Case Study: Volleyball Players)

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ABSTRACT

The purpose of the present article is to design indicators and variables that represent the value of volleyball players. This research method is applied, which was done in a quantitative and qualitative way. The research tool was a semi-structured interview with experts in the field of player valuation. In this research, the statistical population included all the experts and specialists in human resources and financial management issues in sports, and also volleyball experts. The sample size included a number of volleyball sports experts who expressed their ideas to determine the variables. A total of 60 variables were extracted, of which 40 are quantitative indicators and 20 are qualitative indicators. These indicators are not only effective in the selection of players, but can also determine the price and final value of the players.

Introduction

Today, people bring knowledge, skills, wisdom, knowledge and love to organizations in addition to work. This type of capital in the new accounting theories of human resources has correctly assigned an effective position. Accordingly, it can be said that the amount of human creativity and intelligence is a capital (Gholami, 2006) Organizations are always moving towards predetermined goals and their activities in line with achieving the same goals, but they also have goals that strive to achieve. Whenever a correct and appropriate system for assessing the competence and merit of employees is designed and implemented correctly, it is not only an effective factor in achieving organization goals, but it will also play an important role in meeting the goals and real benefits of the employees. Evaluating people's competence can ensure satisfaction of the employees on one hand and satisfaction of organization managers and officials on the other hand. Basically, the employees of every

organization like to receive feedback on their performance and to be aware of the strengths and weaknesses of their work. Performance evaluation gives them this possibility, so their satisfaction is provided by this means. Managers also always seek to obtain data about the performance of the organization's employees so that they can guide the organization well in order to achieve its goals when planning and making decisions with more knowledge, Performance evaluation of employees gives them this opportunity and ensures their satisfaction(Shafiee Rodposhti, 2016). But the main issue is how the managers of the organization can manage these resources. One of these human resources which is very sensitive, is human capital and evaluating it. Having the knowledge about the economic value of such assets for organizations is considered one of their strengths, (Molaee, 2018). Valuation is important in all organizations and this method also used in sports organizations as an important criterion to recognize players, their capabilities, recognize individual differences, talent and final pricing, and selecting and employing them in teams. Investigations demonstrate that volleyball has an important and special place among all kinds of sports in the world, and due to the advancement of this field in the country and the existence of potential in this field, as well as important issues that the field of volleyball is struggling with, scientific investigations and solving problems in a scientific way is necessary. As for the role and importance of human resources in sports teams, as well as the different characteristics and conditions of volleyball (television broadcasting rights, private and public investment, etc.), volleyball clubs, as a sports organization, are in direct contact with their human resources, who are the same players indeed. As the valuable capital of a sports club, players are the most important and expensive assets of sports clubs, and in related markets, exorbitant sums are paid for them. Now, in Iran, the sums paid for this purpose are usually considered as the course fee in case of profit and loss (Izadyar, Memari, & Mousavi, 2016). Therefore, players are not shown as assets in the balance sheets of Iranian clubs, and in determining the value of human assets of sports clubs, there are different procedures that require the identification and selection of a procedure appropriate to the current conditions of sports in Iran. Also, as for the importance of the amounts paid to buy players and their role in achieving sports clubs' sporting and commercial goals, determining the value of players for sports clubs is considered an important issue (Izadyar et al., 2016).

One of the important issues in sports in Iran is lack of a model to evaluate and determine the quality of players, lack of strategic planning of the club system, weakness in the organization related to the club system, weakness in monitoring, control and evaluation of sports clubs, lack of research and research process. Weakness in existing laws and state ownership of big sports clubs are the biggest problems of Iran's club ownership system. In the sports management literature, there is still no model based on which to determine the value of an athlete (based on his uncertain performance in the future). Also, very little research has been done on developing models and methods for organizations and sports clubs in order to measure the cost and monetary and non-monetary value of employees and players, that is, about the main issue. Like the valuation of human resources in the organization and the different opinions that exist in this field, in the sports organization, disagreements and bargaining to determine the salary or contract fee of the athletes are controversial issues, and during the recent years, with the orientation towards professionalization of athletes this issue has become more common than previous years, especially nowadays, that the determination of the salaries of athletes is done with the supervision and decision of the government. This problem is obvious in all sport fields of Iran. The same goes for different disciplines such as volleyball, while huge sums are spent to buy players in volleyball, the country's volleyball league organization has many weaknesses in terms of lack of funds and financial problems (Izadyar et al., 2016). The lack of balance in the payment of salaries between well-known players and not prominent players is also one of the important problems in this filed, because paying a much higher amount to well-known players and spending the majority of the budget on these players causes other players have a much lower salary than the main players, and this issue creates inequality and injustice between players, which in turn can jeopardize the motivation of other players. Mismanagement and player rule can also be one of the factors causing this problem. Given that all the processes of a sports club, like a sports team in volleyball, are carried out by its human resources, and also the most important part of its mission is achieved by the team players by obtaining results, it doubling the importance of the players in the sports club. Therefore, the valuation of these resources, which are the team players, seems very

necessary, and the data about the valuation of the players should be given to investors, managers, management and others through financial statements (Murugan & Rao, 2003). Extensive research has been done in the field of evaluation of sports players that demonstrates the importance and necessity of this research.

Mahmoudizadeh Azari et al. (2019) presented market value model of professional football players in Iran's Premier League in their research. The aim of this research was to design a model of the value of professional players in the Premier League of Iranian football, that at last using interviews and classified categories, the final price or value of a football player in the Premier League of Iran in the transfer market was determined based on the special values of the player, requirements and institutions and its consequences (Mahmoudizad Azari, Ehsani, & Nazari, 2022). In another research conducted by Abdi et al. (2015), they determined the role of factors influencing the valuation of Iran's top football players. The findings indicated that factors such as age, the number of national games, the number of goals scored by the player, the level of the player's previous team and the number of attendances in the regular lineup in the previous season, have an effect on the price of players as the human capital of clubs and other factors including Game position, individual and team awards and honors, foot condition, height, goal ratio and minutes played had no significant effect in determining the price of players (Abdi, Zangi Abadi, & Talebpour, 2016). In foreign research, many scholars have met these issues, including Muller et al. (2019) in a research entitled (Beyond group judgments: data-driven estimation of the market value of players in football) points to the conclusion that from a managerial point of view, the most important decisions that the team managers take is the decisions regarding player transfers, thus the matters related to player valuation, especially the determination of transfer fees and the market values of these players, are among their basic issues and concerns. In another research carried out by Poli, Ravenel and Besson (2015), in the monthly football observation report under the title of "Transfer Value and Probabilities", they presented key indicators in the estimation of players' transfer value in the form of two dimensions. These two dimensions include the player (age, playing position, contract, international status, experience and performance) and clubs (successes, results and level of competition) (Poli, Besson, & Ravenel, 2021). All the topics discussed show that there are so many problems and issues to value the players, and the need to design one or more scientific and appropriate methods to design a model that can meet the needs of the country's sports is felt. Thus, according to the mentioned issues, it is necessary to adopt a suitable method to analyze and evaluate the players who are the human capital of the organization and have future benefits for the organization or club under investigation, so as to avoid confusion and complexity of valuation of players in volleyball and other sports fields and a positive step to be taken and a correct method to determine the important factors of players' value to be established. Therefore, in this research, the researcher seeks to explain and design a model for valuing the players of the Premier League of Volleyball in order to provide a comprehensive model for the use of sports managers and coaches.

Methodology

This research method is applied, which was done in a quantitative and qualitative way. This research is descriptive in terms of how to collect data, which was done by survey and Delphi method. In the qualitative phase of this research, at the beginning, using the seven-step ultra-composite method of (Sandelowski, Docherty, & Emden, 1997), (stages of setting research questions, systematic review of texts, searching and selecting suitable articles, extracting data from articles, analyzing and analysis and compilation of qualitative findings, controlling extracted codes and presentation of findings) were done.
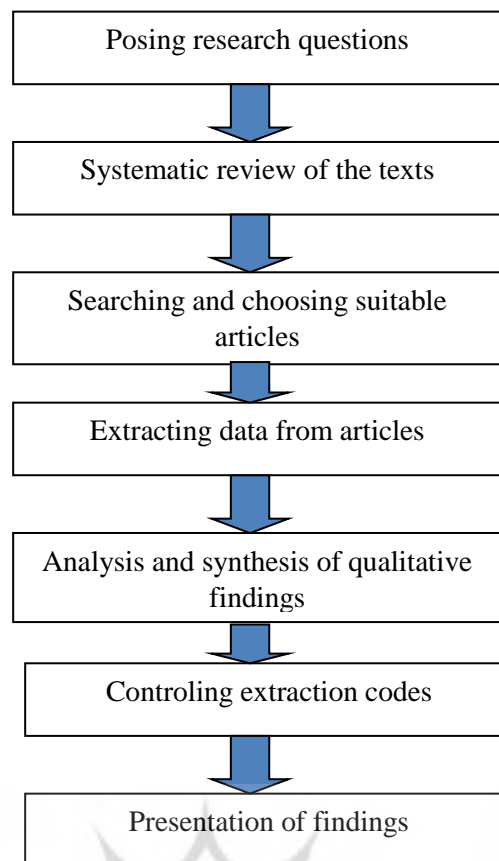
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Figure 1. Seven-step meta-synthesis method of Sandlowski and Barroso

First, the research questions related to determining and suggested indicators of players valuation were specified by using the parameters of what (What), the studied community (Who), time limit (When), how the method (How). In the next step, 260 authentic foreigner and Iranian articles related to the valuation of human resources and its framework, in publications, magazines and search engines during the last 20 years, from 2002 to 2022, were examined. To select suitable articles, various parameters such as abstract, content, accessibility and quality of the research method were evaluated, and finally 100 articles were approved for evaluation, among these articles, 100 indicators were used as variables. The main values of the players were extracted and coded. Through the next step, the extracted codes were categorized according to the semantic affinity and the concepts created in a similar category, and the initial evaluation framework was presented. In order to localize the indicators and determine the validity and reliability of the presented framework, a field survey was carried out. It was a semi-structured interview as well as the distribution of a semi-closed questionnaire among the statistical population, which was used to examine the validity and reliability of the framework extracted from the meta-combination method. The statistical population included all experts and specialists in human resources and financial management issues in sports, as well as volleyball experts. In the quantitative part of this research, using the snowball sampling method, the sample size was saturated with the opinions of 10 experts, and benefiting from their opinions, the final framework of player valuation was determined. In order to analyze the results of the experts' questionnaire, in order to localize the indicators, the binomial distribution test and SPSS software were used, so that the indicators unrelated to the valuation of volleyball players were removed and the indicators related to each other were placed together; therefore the indicators were localized. Finally, by removing irrelevant indicators and adding other indicators by experts and confirming it by other experts, the final result was determined. In this research, content validity has been done from two aspects; the first aspect is the use of components and indicators of volleyball player valuation and its framework in the past literature, which leads to the validity of the framework itself, and the second aspect is the classification of categories and codes through semi-structured interviews with experts. To confirm the reliability, the technique of creating structured processes was used to

implement and interpret convergent interviews; as a result, the reliability of this framework has been proven through interviews and its interpretation.

Results

In the first stage of this research, various databases, publications and search engines between the years 2000 and 2021 have been examined inside the country and abroad. To search for research articles a variety of keywords have been used, such as: player valuation, valuation framework in sports and volleyball, athlete pricing, factors affecting the selection of players in volleyball and other sports, valuation tools, player valuation model in sports. 100 articles were found as a result of searching and checking databases, publications and different search engines using the desired keywords. After completing the stages of meta-combination methodology, the dimensions and components of the players' valuation framework were extracted. In the following, various parameters such as title, abstract, content, accessibility, content and quality of the research method have been evaluated to select suitable articles. The data of the articles in this research are classified in three parts: in the first section, the components and indicators of the players' evaluation framework extracted from the articles, in the second part, their frequency, and in the third part, the reference of each article, including the name and family name of the author was stated along with the year of publication of the article. Valuation indices were coded and 97 indices were extracted. Physiological factors of players are determined in the following table

Table 1. Physiological factors

Codes	Frequency	References
VO$_{2max}$	6	(Nazari, Salimi Avansar, & Nazari, 2015) (Shavandi & Saremi, 2012), (Ebrahimi Atri, Sanati, & Khodabakhshi, 2011), (Karahan, 2018)
Oxygen Consumption	1	(Tavasoli, Gaeeni, & Ravasi, 2001)
Anaerobic power	2	(Tavasoli et al., 2001) (Mohammadzadeh & Sami, 2014)
Velocity (40yards) (Sprint)	17	(Nazari et al., 2015) (Ebrahimi Atri et al., 2011), (Shavandi & Saremi, 2012) (Rezaee & Bagherpour, 2017) (Alizadeh, Rafizadeh, & Khan Babaee, 2018) (Tavasoli et al., 2001),(Karahan, 2018), (Möck & Wirth, 2019), (T. Gabbett et al., 2006), (Moreno, Asencio, & Badillo, 2014), (Marques & González-Badillo, 2006), (Eliakim, Portal, Zadik, Meckel, & Nemet, 2013), (T. J. Gabbett, 2008),(Buśko, 2019)
Ergo Jump	2	(Nazari et al., 2015), (Shavandi & Saremi, 2012)
Vertical Jump	20	(Nazari et al., 2015), (Shavandi & Saremi, 2012), (Singh & Singh, 2016), (Tayebi, Razavi, Ghorbanzadeh Ghaziani, & Mojtaba, 2009),(Asad, Azar, & Hamid, 2013), (Tavasoli et al., 2001), (Karahan, 2018), (T. Gabbett et al., 2006),(Marques & González-Badillo, 2006), (Moreno et al., 2014), (Eliakim et al., 2013), (Moreno et al., 2014),(Moradzadeh, Sheikh, & Miali, 2017), (T. J. Gabbett, 2008), (Naseri Koshki, Haghighi, & Hamedi Nia, 2015)
Handgrip Strength	11	(Nazari et al., 2015),(Ebrahimi Atri et al., 2011), (Rezaee & Bagherpour, 2017),(Hasan, 2012), (Marques & González-Badillo, 2006), (Moreno et al., 2014), (Marques & González-Badillo, 2006), (Buśko, 2019), (Marques & González-Badillo,

		2006), (Moradzadeh et al., 2017), (Rauch et al., 2018)
Agility	11	(Nazari et al., 2015), (Moradzadeh et al., 2017), (Singh & Singh, 2016), (Tavasoli et al., 2001), (Karahan, 2018), (T. Gabbett et al., 2006), (Moreno et al., 2014), (T. J. Gabbett, 2008), (Naseri Koshki et al., 2015)
Flexibility	6	(Nazari et al., 2015), (Ebrahimi Atri et al., 2011), (Shavandi & Saremi, 2012) (Singh & Singh, 2016), (Tavasoli et al., 2001), (Hasan, 2012)
Flexion of the trunk to the back	1	(Tavasoli et al., 2001)
Sit-up	3	(Nazari et al., 2015), (Singh & Singh, 2016), (Tayebi et al., 2009)
Reaction Time	1	(Nazari et al., 2015)
Spike Jump	2	(Nazari et al., 2015), (Naseri Koshki et al., 2015)
Defender Jump	2	(Nazari et al., 2015), (Heydari Dahooee, Dehghan, Vanaki, & Khoram, 2018)
Spike height	2	(Basereh, Doosti, & Farzan, 2016), (Heydari Dahooee et al., 2018)
Attack block height	1	(Basereh et al., 2016)
High visual reaction speed	1	(Basereh et al., 2016)
Power	2	(Ebrahimi Atri et al., 2011), (Ebrahim, Heydari, & Moameri, 2015)
Muscular endurance	1	(Rezaee & Bagherpour, 2017), (Hasan, 2012)
General endurance	1	(Rezaee & Bagherpour, 2017)
Explosive power of the shoulders	1	(Singh & Singh, 2016)
Explosive power of the legs	2	(Alizadeh et al., 2018), (Karahan, 2018)
Two legs long jump	7	(Tayebi et al., 2009), (Tavasoli et al., 2001), (T. Gabbett et al., 2006), (Häkkinen, 1993), (Marques & González-Badillo, 2006), (Moreno et al., 2014), (T. J. Gabbett, 2008)
Jump over the line (zigzag) 20 s (to the numbers)	1	(Tayebi et al., 2009)
Sidestroke in 20 s (to the numbers)	1	(Tayebi et al., 2009)
Balance		(Hasan, 2012)
Shuttle run		(Hasan, 2012)
Bent arm hang		(Hasan, 2012)
Plate tapping		(Hasan, 2012)
Site and reach (cm)		(Hasan, 2012)
Flamingo balance (mistakes)		(Hasan, 2012)
Anaerobic power average	1	(Karahan, 2018)
Max anaerobic power	1	(Karahan, 2018)
Min anaerobic power	1	(Karahan, 2018)
Max aerobic power		(T. Gabbett et al., 2006)
Isokinetic Leg Press Strength		(Möck & Wirth, 2019)
Physical strength	2	(Marques & González-Badillo, 2006), (Buśko, 2019)
Leg strength	1	(Buśko, 2009)
Heart rate in stand-up position	1	(Moradzadeh et al., 2017)
Heart rate after tolerating the standard load	1	(Moradzadeh et al., 2017)
Upper body muscular strength	1	(T. J. Gabbett, 2008)

After arranging and arranging the obtained data, in the next step, by conducting a semi-structured interview with 10 experts in the field of sports management and volleyball experts (Table 2) and also distributing a semi-closed questionnaire among them, the validity and reliability of the extraction framework was investigated by Meta combination method. Moreover, the results of the semi-open questionnaire were evaluated by binomial distribution test, until indicators unrelated to the evaluation of the players were removed and therefore the indicators were localized.

Table 2. Valuation experts

Valuation Experts	Organizational Position	Education Status
Ali Poor Oruji	Head coach of national volleyball teams and former head coach of Bangladesh national team	PhD
Davood Nasr Esfahani	Faculty member of Khawaresgan Physical Education Faculty and employee of Isfahan Sports Department	PhD
Ali Zamani	Manager of Folad Mubarake Isfahan volleyball team	MA
Gholamreza Momenimoghadam	Former player of the national volleyball team and coach of club volleyball teams in Iran and coach of the national youth team	MA
Fariba Sadeghi	Former head coach of the volleyball team and Iranian women's national volleyball team	MA
Ms. Esmaeeli	Volleyball coach of university teams	MA
Mr. Afshardoost	Secretary of Volleyball Federation	MA
Mr. Yaser Veisi	Bodybuilding coach of the national volleyball team	MA
Mr. Nikzadian	Faculty member	PhD
Meysam Shafieei	Faculty member of University of Tehran, Professor of Marketing, University of Tehran	PhD

The validity of research content was done from two aspects, the first includes the use of components and indicators of players' valuation and its frameworks in the past literature, which itself leads to the validity of research framework, and the second includes the classification of codes through semi-structured interviews with experts that the indicators were completed with their opinions. To confirm the reliability, the technique of creating structured processes for the implementation and interpretation of convergent interviews has been implemented, consequently, the reliability of this framework has been proven through interviews and its interpretation. During the interview with the experts, they added 10 indicators to the valuation indicators and other experts also confirmed the existence of these 10 indicators in the evaluation of the players, therefore these indicators were also added to the final table. Finally, 60 indicators were approved, of which 40 are quantitative and 20 are qualitative ones, which can be seen in the table below.

Table 3. Determination of final indicators

Row	Quantitative Indicators	Qualitative Indicators
1	Defender jump rate	Tactics
2	Jump rate of spike (spike)	club satisfaction with the player
3	Bump	Agility
4	Pass with hand	The power of play with foot
5	The least error in a post	Flexibility
6	(The number of scored spike attacks in a league)	Knowledge level about volleyball
7	The number of successful underhand service (Ace)	The quality of relationship with playmates

8	Successful block	The level of attraction for the sponsor
9	The highest score in a league	The quality of fans satisfaction with the player
10	Height	The quality of spirit in the condition of falling behind
11	Weight	Quality of professional life
12	The best receiver	Commitment to the club
13	Velocity	The power of impact on the opposite team
14	Age	Attendance status in sports magazines
15	Longitudinal range of hands	Accountability
16	Length of hands	Power of decision making
17	Length of palms	The degree of influence people
18	Relaxed arm circumference	Coach's satisfaction with the player
19	Contracted arm circumference	The quality of following the coach's instructions
20	Forearm circumvent	Following the public and social ethics
21	Shoulders width	
22	Chest circumference	
23	Waist circumference	
24	Fat percentage	
25	Net Body Mass	
26	Body Mass Index (BMI)	
27	Ectomorph Body Type Rate	
28	Mesomorph Body Type Rate	
29	Endomorph Body Type Rate	
30	Vertical Jump	
31	VO2MAX	
32	Handgrip strength	
33	Sit-up	
34	Reaction Time	
35	Agility	
36	Number of attendance (regular attendance time) in a league	
37	Body strength	
38	Number of come backs with the presence of the player	
39	Number of national game	
40	Number of club games	

Discussion and Conclusion

Human resources are the most important knowledge capital of an organization; therefore, it is considered as a source of creativity in the organization. Undoubtedly, in order to coordinate with global progress and development, human resources and employees are the most important resources, because without having a skilled and specialized force, physical and material resources cannot be used in the best and optimal manner (Nabipour Afrouzi & Darvish Motevali, 2014) Since athletes are the key elements of a team to achieve results, the selection of appropriate players will determine the fate of a team, so players are the most important human resources in a sports team. The process of choosing an athlete for a sports team is one of the most pivotal issues in sports today (Madadizadeh, Aminizadeh, & Mirhoseini, 2016). Researchers believes that from the point of view of championship sports, the type and quality of abilities required for each sport is different, and therefore, special criteria should be considered in selecting players for each sport. It seems that currently, due to the

personalized, emotional and irrational valuation, the definition of scientific and logical indicators to regulate the valuation process of volleyball players in Iran is one of the necessary matters in this field. In this process, the first step is to formulate the goal and identify relevant indicators. From the point of view of championship sports, the type and quality of abilities necessary for each filed is different, and therefore, special criteria must be considered in selecting players for each specific sport (Dadelo, Turskis, Zavadskas, & Dadeliene, 2014). The existence of suitable indicators for the accurate evaluation of players and their correct selection method in sports competitions plays an important role in the victory or defeat of a team. In this survey, the researchers tried to find suitable criteria for the correct evaluation of players, so that they can identify players with high skill indicators. These indicators were extracted through the study of more than 100 domestic and foreign articles, the website of the World Volleyball Federation (FIVB) and interviews done with the professors and coaches of the national volleyball teams and volleyball physical fitness professors, and through the snowball method. The indicators obtained in this research include a wide range of factors required by a professional and high-level player; Indicators such as physical and movement or physiological fitness, physical or anthropometric factors and skill factors have been considered. Other researchers also reached similar results in their research, in a way that Smith and colleagues (1996) have investigated the importance of physical and physiological factors and the difference in performance between the Canadian national team and the selected university team. In general adding up, they concluded that national team players have more strength, speed and power in proportion to university players (Smith, Roberts, & Watson, 1992). Also, Dopsaj (2000), mentioned anthropometric indicators as very important factors in volleyball (Dopsaj, Aopi, neoi, & Sikimi, 2010). Skill indicators are also very important in the evaluation process and due to its important role in players' sports performance; it is considered as an important indicator in evaluation. In the proposed program of Malaysia (1994) for talent identification among many indicators, some skill indicators such as Bump, overhand pass, Serve and attack are also seen. In addition to the mentioned indicators, psychological and personality indicators are also considered as important factors in the evaluation of players. This shows that psychological capabilities are necessary for volleyball player's success. Responsibilities, maintaining morale and quality of relationship with teammates are important characteristics that allow athletes to endure mental fatigue and help maintaining team morale in stressful situations. In this research, several factors were considered to evaluate volleyball players.

The indicators obtained in this research include criteria that consider both quantitative and qualitative indicators of the players, also the physiological and anatomical indicators of the players are also seen in these criteria, this shows that the researchers have been trying to make a proper and accurate evaluation on these criteria and have tried to choose all the appropriate indicators. Based on the results obtained in this survey, it can be seen that several factors and indicators can and should be considered in the process of talent identification in volleyball and it is not possible to pay attention only to the indicators of a specific area, although it can be claimed that the indicators of some areas contribute more to some sports fields than others. Another feature of the results of this research is its guidance for volleyball players in personal growth and as result, team growth, and it can bring permanent growth for the team and players. The advantage of this type of valuation and its implementation process is that other sports teams can also design a valuation system suitable for their sports discipline and team while maintaining its logic and pattern. The results of other researchers were the same as this study research. for example, (Harati, Peymanizad, Talebpour, & Keshtidar, 2020) dealt with detecting effective indexes on handball premier league clubs intangible economic valuation which results showed that communication capital, variable spiritual capital and human capital have priority and 20 key indicators were obtained in the economic valuation of intangible assets of Premier League clubs.

In another research conducted by Fringer et al. (2021) it showed that coaches use performance components such as age, number of matches, running distance, successful passes and other things to take advantage of players, and the value of a player is affected by the club as well (Frenger, Emrich, Geber, Follert, & Pierdzioch, 2019), Also, in the research of Kirschstein and Liebscher (2018), it was shown that a player's affiliation with a particular team may contribute to his market value and may be overestimated (Kirschstein & Liebscher, 2018).

In the final summary, factors influencing the valuation of volleyball players can be divided into sections such as basic and personal data of the players and performance data of the players; As an example, a factor such as age can be considered as a player's personal data, and factors such as the number of national games, the number of scores obtained by a player, the level of the previous team and the number of games in the previous season of the player can be considered as the performance data of the players. The data extracted in this research can be of great help to volleyball coaches in choosing better players. With the research results, coaches can always have accurate and effective resources in selecting players and obtaining desired results. This research, in addition to trying to find appropriate indicators for player valuation, can pave the way for further research so that researchers can evaluate players more accurately in terms of financial value through the identified indicators. According to the obtained results, it is suggested to the individuals, organizations and clubs involved in the discussion of the valuation of volleyball players that during the negotiation and final conclusion to make the contract, pay special attention to various factors and variables of the players, which have been fully addressed in this research. It is hoped that the application of the results of this research will be a starting point to solve the problems in this field and can help, even if a little bit, to solve the problems of valuing players in volleyball and other sports in Iran.

Acknowledgment

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