The Relationship between Social Solidity and Sustainable Development in Badminton from the Perspective of the Country's Elites*

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Abstract

One of the most important current challenges of developing societies is to achieve sustainable development in all areas. This important goal in the field of sports on the one hand reflects the level of social cohesion and on the other hand shows the human capacity in societies. Also, the relationship between the level of development and social well-being and satisfaction with mental health and reducing hospital problems is not hidden from anyone. Of course, among the obstacles to social cohesion are economic and cultural barriers. The pervasiveness of sport, especially championship sports, and the importance of its place in international relations, has attracted much attention by governments. The ability of a sports system to sustain itself inevitably depends on the success that the system achieves in relation to the environment. But the need for sustainable development with the environment requires the distribution of resources and work responsibility among the components of the system in such a way that internal elements accept their position and part along with other elements to continue the operation and stability of the system in a changing environment.

The purpose of this study is to explain the relationship between social cohesion and sustainable development in badminton from the perspective of the country's elites. The statistical population in the qualitative section was 20 sports elites who were collected using interviews and theoretical saturation. A small number of athletes, coaches, supervisors and elite badminton managers, numbering 242, also participated. The statistical indicators of the questionnaire of components of social cohesion related to sustainable development in the countries' badminton elites are summarized as follows: (1) the component of feeling of integration of individuals in society: this component explains 19.761% of the total variance and includes 5 items. (2) Friendly

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and loving relationship component: this component explains 18.664% of the total variance and includes 5 items. (3) The amount of social relations component: this component explains 13.138% of the total variance and includes 5 items. (4) The component of group interactions based on shared and integrated values: this component explains 13.0331% of the total variance. GFI indices AGFI and NFI show a very good fit and due to the fact that the values of these indicators are above 0.9, they indicate a good fit of the model. The results showed that social cohesion and space play a decisive role in maneuvering the badminton sports elites, which in turn plays an important role in selecting and implementing development plans for the benefit of athletes and achieving sustainable growth and development.

Keywords: Social Cohesion, Badminton, Sustainable Development, Sports Elite

Introduction

According to most researchers and thinkers in the field of cultural studies, social capital, even if it is a single concept, certainly does not have a single instance in all societies, and the requirement of its capital is that it should be formed in every society in accordance with the necessities of that society. National identity, historical background, beliefs, religion, common pains and joys, and the general gains and losses of a society play the main role in the production of its social capital, and consequently the amount of social capital in different societies cannot be indexed the same measurement. Therefore, one of the most important obstacles in social cohesion is economic and social barriers (Hosseinzadeh, 2016: 851). But the concept of sustainable development is the opposite; this means that sustainable development meets the needs and aspirations of human beings, not just in one country and one region, but all people around the world today and in the future. From this perspective, sustainable development as one of the central and key goals of societies and for governments today has a special place and importance in comprehensive, macro plans, macro-growth, and development of countries and even at various levels. It is constantly discussed in international conferences, organizations and institutions (Alavi 1396: 19). The pervasiveness of sport, especially championship sports, and the importance of its place in international relations, has attracted much attention by governments. Various continental and world competitions, and above all the Olympic Games, have become the arena of competition for the selected sports of the nations, and through this, various sciences and technologies have been used in sports (Ben, 2018: 133).

The success of countries in international sports arenas, in addition to social and economic effects, is a symbol of stability and comprehensive classifications of these countries, and is one of the reasons for the high investment of countries in championship and professional sports, in this case (Javanmard 1391: 37). Today, development in various dimensions is on the agenda of all countries in the world. Development of a country is a general concept that makes sense with development in different areas. The rapid growth of communication technologies, especially in the field of mass media has caused a new role to be identified for them every day (Hosseinzadeh, former: 853). From a sociological point of view, social cohesion can be defined as the sense of

unity among the members of a society, friendly and loving relationships, the extent of social relations and group interactions based on shared and integrated values.

Examining the role of social capital on the dimensions of sustainable development is important not only at the international level, but also at the national level, especially in countries such as Iran from various social, cultural, political and economic aspects. It is clear that in order to assess the role of social support and cohesion and its relationship with the dimensions of sustainable development, recognizing the existing dimensions, components and perspectives on supporting social cohesion seems necessary (Alavi 2017: 21-22). This issue is important from the point of view that activities appropriate to its structural context pave the way for socio-economic dynamics and transformation. In other words, the set of structures, both environmental-physical and socio-economic, provides a suitable platform for the fruitful development. In this regard, if the orientation is based on purposeful planning and in line with the principles of sustainable development, sustainable physical-spatial development becomes possible (Saeedi 2017: 9). Social cohesion is a societal concept and is closely related to social capital, which seeks to organize similarities and differences in society. The premise is that human beings have different requirements and needs, while not only their necessities are taken into account, but also their differences with others are taken into account (quoted by Mokoto, 2012).

Social cohesion is more of a bottom-up concern than a top-down concern; in other words, it looks at defining and re-reading differences rather than collecting similarities. The concern of social cohesion is identity, not the attributive and intrinsic identity but the acquired and cultural identity of the work that has been formed with long-term education in terms of discipline and social status and has formed one's job and welfare position (Papanis, 2007). Social cohesion takes into account the cultural differences in human relationships and is concerned with public morality, so all organizations will have to take on strategic management, so successful organizations will be able to learn from science and strategic management in the direction of development. What made the participation of all sections of the people and their savings in the processes of production possible was the pervasive sense of salvation reinforced by the virtuous sense of belonging to an integrated community. Significant improvements in economic life and government performance were made possible by norms and networks of civic participation.

According to George Simmel, the result of such conditions is the instability of relations and the decline of social trust. The idea of degrading the first social relations is still in the focus of sociologists. Contemporary sociologists have paid special attention to the concept of social capital to study the quantity and quality of social relations and cohesion in society (Nazari 1390: 29). Social capital is networks, norms, and trust that enable participants to interact more effectively with each other and pursue their common goals. Robert Putnam has reviewed numerous studies that have reported a positive link between social capital and government democracy, academic achievement, crime, child welfare, happiness, and physical and mental health. He cites the results of several studies that show a social link with personal health and well-being. On the other hand, the first unified explanation of the term by Pierre Bourdieu defines social capital as "the sum of potential and actual resources associated with membership in a group", each of which is supported by providers of social capital. Therefore, in Bourdieu's

definition, the emphasis is on social networks. In the 1990s, the concept of social capital was introduced by the World Bank, to which it devoted a research program, and Robert Pantam's book *Bowling Alone* (Davoodzadeh 2015: 59-53). Coleman argues that social capital is based on its function. Social capital is not a single essence but a collection of different essences. In order to analyze social capital, Bourdieu first describes the various other types of capital, including economic capital, cultural capital, and symbolic capital, and then argues that social capital is a network of individual and collective relationships that each individual or group possesses. . This definition causes, first, the conceptual spaces of social capital to be more limited and, secondly, to separate it from other types of capitals, especially cultural and symbolic capitals (Azkia, 2004).

Javanmard et al. (2014) studied the sociological function of sport on social cohesion in Iran in the eighties and stated that the results of statistical tests using Pearson and Spearman correlation coefficient between the degree of social cohesion with the independent variable of understanding and agreement with 0.785 had the highest correlation coefficient and vitality and freshness with 0.295 had the lowest correlation coefficient. The results obtained from multiple regression with respect to the value of F test and its significant at a level of confidence above 95% indicate that the regression equation and its results can be analyzed. Ghadimi et al. (2017) studied the socio-cultural effects of sports development in Iran with emphasis on football and stated that they have related the relationship between football and some cultural phenomena and social issues in Iranian society. The result indicated that the attraction of ethnic groups in the national society through the sport of football and the participation of women in the public spheres of society is one of its identity-building functions. This sport is a place for the manifestation of behaviors and violence that are not normally allowed. Football is cheap, simple, exciting and fun for people.

Based on this matter and according to the existing approach and documents, the purpose of this study is to explain the relationship between social cohesion and sustainable development in badminton from the perspective of the country's elites. Sport is one of the few areas that brings physical and mental health of the society together and the development of a society depends on the rise of these two indicators. Therefore, without a doubt, sport is one of the basic axes of achieving sustainable development of societies. On the other hand, along with the development of sports culture among the general public by providing and equipping sports venues, winning valuable titles in professional sports will cause national pride, honor and authority of a country and is very pleasant and should be promoted for a beautiful name and holy flag. The Islamic Republic of Iran has taken great steps in all international, global, Olympic and Asian arenas with the help of God, planning, effort and diligence. Therefore, the purpose of this article is to address this issue and conceptual progress of sustainable development in areas such as differentiating the sustainable development paradigm, explaining and drawing the framework of sustainable development, determining and explaining sustainability and its semantic expansion and implementation in badminton considering the relationships raised.

Methodology

From the 1990s onwards, some researchers and methodologists, by introducing research methods, sought to create a kind of convergence and integration of qualitative and quantitative approaches in social science research. Research with combined methods is based on paradigm convergence and combining some ontological, epistemological and methodological principles of the dominant quantitative and qualitative paradigms in science in such a way that the emergence of a new paradigm goes beyond theoretical and methodological controversies they have led. The spatial scope of this study includes all elite badminton athletes in the country and the subject area of this research is related to presenting a model to explain the components of social cohesion related to the sustainable development of the country's badminton elite.

The statistical population in the qualitative section was 20 sports elites who were collected using interviews and theoretical saturation. In a small part, the participation of athletes, coaches, supervisors and elite managers who have a significant impact on the thinking and practice of the badminton community was used, which included 242 people and all the statistical population in total participated in the study. Since the interview tools can be better informed about the participants' experiences, in this study, in-depth interviews were used as the main data collection tool. In this regard, the researcher guides all the interviews and this data collection tool provides the possibility of direct contact with the interviewee and with the help of it can be a deeper assessment of the perception, attitudes, interests and aspirations of the subject. Interviewing, on the other hand, is a tool that allows the subject to examine complex topics, follow up on answers or find the causes, and ensure that the subject understands the question. To determine the validity, the tools of determining the face validity and content and structure were used. The questionnaire based on the transcript of interviews with qualified individuals was approved by several professors and experts before distribution. In this research, statistical methods of structural equation modeling and confirmatory factor analysis have been used simultaneously to test the model assumptions and evaluate the fit of the model with the data collected from the statistical population of the research.

Findings

In this section, first to identify the dimensions and components and indicators of social cohesion related to sustainable development in the badminton elite, interview with experts who are proficient in the subject was done, and then based on the dimensions, was identified and approved by individuals. Using the theoretical foundations of the research, the components were identified and then the index (items) in the quantitative section was evaluated. Finally, the four components of social cohesion affecting the sustainable development of badminton were explained as follows, including a sense of community integration, friendly and loving relationships, the extent of social relationships, group interactions based on shared values. The descriptive statistics related to the demographics of the respondents are as follows:

Table (1) Demographic characteristics of the sex of the statistical sample

Dimensions	Abundance	Frequency

Gender	Female	69	28,5
	Male	173	71,5
Total		242	100

Table (2) Demographic characteristics of the age range of the statistical sample

Dimensions		Frequency	Abundance
Age	20 to 25 years	12	29
	26 to 30 years	25,2	61
	31 to 35 years	45,5	110
	35 years and up	17,4	42
Total		100	242

For descriptive statistics of variables, we go to the specific questions of the questionnaire, which are extracted using Likert scale scoring, and finally, descriptive statistics for each variable are presented below.

Table (3) Descriptive statistics for research variables

	Feeling of integration of people in the community	Friendly and loving relationships	The extent of social relations	Group interactions based on shared and integrated values
Number	242	242	242	242
Average	3.5891	3.6798	3.5450	3.7087
Standard Deviation	0.58397	0.57384	0.73872	0.71238
Extension	-0.510	-0.727	-0.718	-0.867
Skewness	-0.061	-0.031	-0.005	0.022

The skewness index is used to measure the symmetry or asymmetry of a distribution. In the fifth column, table (3) is presented for the research variables. The skewness coefficient is acceptable and normal for all variables in the range. For these variables, the skewness of the observations is to the right. According to the results obtained from the questionnaires, the skewness coefficient for all variables is in an acceptable range, in other words, it can be said that the data distribution is similar to the normal distribution. The coefficient of protrusion is an indicator that shows the degree of protrusion or height of a distribution relative to the normal distribution, which is zero in the case of the normal distribution of elongation, and if the elongation of a distribution is greater than normal, i.e. its dispersion is less than normal, the numerical elongation coefficient is positive. Conversely, if the elongation of a distribution is less than normal or its scatter is greater

than normal, the numerical elongation coefficient will be negative. The projection coefficient of the observations in all variables follows the normal distribution.

Table (4) Descriptive statistics for research variables

	Z	Significant	Result
Feeling of integration of people in the community	0,99	0,354	Normal Distribution
Friendly and loving relationships	0,86	0,221	Normal Distribution
The extent of social relations	1,03	0,12	Normal Distribution
Group interactions based on shared and integrated values	**0,94**	**0,337**	Normal Distribution

Considering the significant level in Table (4), which is higher than 0.05 and the value of Kolmogorov-Smirnov for the components of social cohesion related to the sustainable development of the country's badminton elite, it indicates that the component data had a normal distribution. After conducting interviews with experts, four indicators were explored according to the theoretical foundations and research backgrounds. Now, for statistical explanation and inference of these dimensions using confirmatory factor analysis using LISREL software. According to the information in exploratory factor analysis, the analysis of 24 items of the initial questionnaire used the method of principal element analysis with vertical rotation and Varimax technique and the value of the reliability index based on Cronbach's alpha coefficient KMO is 0.799 because the index is close to one. The selected samples are sufficient for analysis. Bartlett test is significant at the level of 0.001. Which indicates the appropriateness of the correlation matrix for factor analysis of data. In addition, nine main factors were identified by exploratory factor analysis and vertical rotation. The criteria for considering the burden of each factor in each study is different; Some researchers use a cut-off point of at least 0.30 and some others a cut-off point of at most 0.55 (Kazemnejad et al., 2011). In the present study, by deleting the items whose factor load was less than 0.5, a total of 20 items were counted and 4 items were removed.

Table (5) Statistical indicators of the questionnaire of components of social cohesion related to sustainable development

Indicator Factor	Special Amount	Percentage of Variance Explained	Compression percentage of variance explained
Feeling of integration of people in the community	8.751	19.761	19.761
Friendly and loving relationships	8.390	18.664	37.345
The extent of social relations	6.417	14.138	50.483
Group interactions based on shared and integrated values	6.307	14.041	64.514

To analyze the factors, the principal component analysis method has been used. The statistical indicators of the Social Cohesion Components Questionnaire related to sustainable development in the country's badminton elite in Table (5) show that the first to fourth factors have values higher than one and are 19.761, 18.664, 13.138 and 031, respectively. 13% and a total of 63.513% explain the total variance. Characteristics are summarized as follows: (1) Component of feeling the unity of individuals in society: This component explains 19.761% of the total variance and includes 5 items. (2) Friendly and loving relationship component: This component explains 18.664% of the total variance and includes 5 items. (3) The amount of social relations component: This component explains 13.138% of the total variance and includes 5 items. (4) Component of group interactions based on common and integrated values: This component explains 13.0331% of the total variance and includes 5 items. Confirmatory factor analysis of latent variables of social cohesion related to the sustainable development of badminton in the country proves the following content.

1. **People's feeling of integration in the community**

Figure (1) shows the model for measuring latent variables (after the sense of integration of individuals in the community) in the standard estimation mode. The factor loads of the model in the standard estimation mode show the effect of each of the variables or items in explaining the variance of the scores of the variable or the main factor. In other words, the factor load indicates the degree of correlation between each observer variable (questionnaire question) and the latent variable (factors).
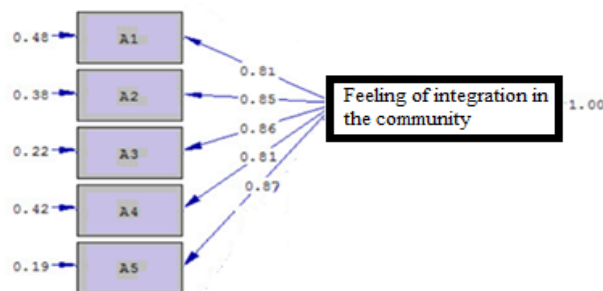
Figure (1) The model of measuring the latent variable after feeling the integration of people in the community in the standard estimation mode

According to Figure (1), the factor loads of each of the research questions can be observed. For example, the factor loads of the questions are 0.81, 0.85, 0.86, 0.81 and 0.87, respectively. In other words:

- The first question explains 81% of the variance of the variable indicators of the sense of integration of people in the community. The value of 0.48 is the amount of error (the amount of variance that cannot be explained by this question).

- The second question explains 85% of the variance of the variable indicators of the sense of integration of people in the community. The value of 0.38 is the amount of error (the amount of variance that cannot be explained by this question).

- The third question explains 86% of the variable variance of the indicators of the sense of integration of people in the community. The value of 0.22 is the amount of error (the amount of variance that cannot be explained by this question).

-Question four explains 81% of the variance of the variable on the indicators of the sense of integration of people in the community. The value of 0.42 is also the amount of error (the amount of variance that cannot be explained by this question).

- The fifth question explains 87% of the variance of the variable indicators of the sense of integration of people in the community. The value of 0.19 is the amount of error (the amount of variance that cannot be explained by this question).

It is clear that the lower the error rate, the higher the coefficients of determination (and the greater the correlation between the question and the relevant factor). The value of the coefficient of numerical determination is between 0 and 1, which means the closer to 1, the greater gets the value of variance explanation. As factor loads show, the amount of all factor loads is higher than 0.5, which indicates convergent validity.

Figure (2) shows the significance of the obtained coefficients and parameters. Significant test values greater than 1.96 or less than 1.96 indicate the significance of the relationship. The basis for confirming or rejecting hypotheses (significance of relationships) is to examine the model in the case of significant coefficients. At the 0.05 error level and the two-way test (normal default) the critical values of the numbers are 1.96 and -1.96.

Figure (2) Model of measurements of endogenous latent variables in the case of significant coefficients

If the significant coefficients are greater than 1.96 or less than -1.96, the zero supposition is rejected and the supposition one, i.e. the existence of a significant correlation, is confirmed.

Table (6) Statistics on the coefficients in confirmatory factor analysis of the indicators of the sense of integration of individuals in society

	Estimate	S.E.	Standardized Estimate	C.R.	P
Question A5> Feeling of integration of people in the community	.599	4.883	.87	5.79	0.000
Question A4> Feeling of integration of people in the community	.524	5.782	.81	4.96	0.000
Question A3> Feeling of integration of people in the community	.638	4.491	.86	5.25	0.000
Question A2> Feeling of integration of people in the community	.778	6.683	.85	14.19	0.000
Question A1> Feeling of integration of people in the community	.792	6.662	.81	13.05	0.000

Table (7) Indicators of structural model fit after the sense of integration of individuals in society

Indicator	Df	X^2	X^2/df	RMSEA	NFI	AGFI	CFI	IFI	GFI
Amount	26	69.83	2.65	0.061	0.91	0.90	0.92	0.90	0.92

Interpretation of chi-square ratio to degree of freedom (X2 / df) ,which is the result of dividing chi-square index by degree of freedom, equals to 2.65, which is acceptable compared to the critical value of 5 indices. The root mean square index of estimation error (RMSEA) in this model is equal to 0.061, which is the allowable limit of RMSEA, 0.08. GFI, AGFI and NFI indices are equal to 0.90, 0.92 and 0.91, respectively, which indicates an upright fit. Given that the values of these indicators are above 0.9, they indicate a good fit of the model.

2. Friendly and loving relationships

Figure (3) shows the model for measuring latent variables (dimension of friendly and loving relationships) in standard estimation mode. The factor loads of the model in the standard estimation mode show the effect of each of the variables or items in explaining the variance of the scores of the variable or the main factor. In other words, the factor load indicates the degree of correlation between each observer variable (questionnaire question) and the latent variable (factors).
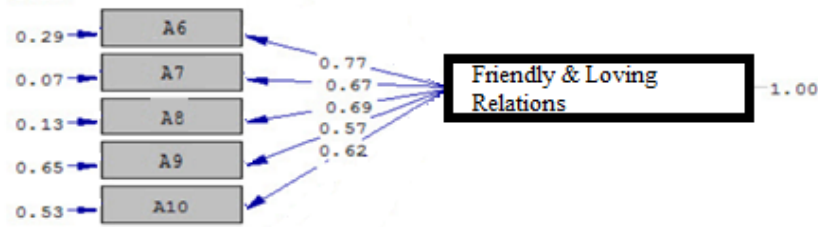
Figure (3) The model of measuring the latent variable of friendly and loving relationships in the standard estimation mode

According to Figure (3), the factor loads of each of the research questions can be observed. For example, the factor loads of the questions are 0.77, 0.67, 0.69, 0.57 and 0.62, respectively. In other words:

- Question 6: 77% of the variance of the variable explains the indicators of the sense of integration of people in the community. The value of 0.29 is also the amount of error (the amount of variance that cannot be explained by this question).
- Question 7: 67% of the variance of the variable explains the indicators of the sense of integration of people in the community. The value of 0.07 is also the amount of error (the amount of variance that cannot be explained by this question).
- Question 8: 69% of the variance of the variable explains the indicators of the sense of integration of people in the community. The value of 0.13 is also the amount of error (the amount of variance that cannot be explained by this question).
- Question 9: 57% of the variance of the variable explains the indicators of the sense of integration of people in the community. The value of 0.65 is also the amount of error (the amount of variance that cannot be explained by this question).
- Question 10: 62% of the variance of the variable explains the indicators of the sense of integration of people in the community. The value of 0.53 is the amount of error (the amount of variance that cannot be explained by this question).

It is clear that the lower the error rate, the higher the coefficients of determination gets (and the greater the correlation between the question and the relevant factor). The value of the coefficient of numerical determination is between 0 and 1, which the closer to 1, the greater the value of variance explanation. As the factor loads show, the amount of all factor loads is higher than 0.5, which indicates convergent validity.
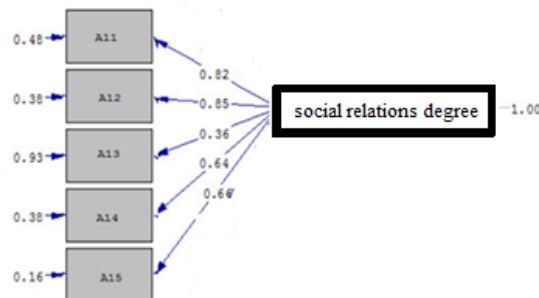

Figure (5) the model for measuring the latent variable of social relations in the standard estimation mode

According to Figure (5), the factor loads of each of the research questions can be observed. For example, the factor loads of the questions are 0.82, 0.85, 0.36, 0.64 and 0.66, respectively. In other words:

- Question 11: 82% of the variance of the variable explains the indicators of the sense of integration of people in the community. The value of 0.38 is also the amount of error (the amount of variance that cannot be explained by this question).
- Question 12: 85% of the variance of the variable explains the indicators of the sense of integration of people in the community. The value of 0.07 is the amount of error (the amount of variance that cannot be explained by this question).
- Question 13: 36% of the variance of the variable explains the indicators of the sense of integration of people in the community. The value of 0.93 is also the amount of error (the amount of variance that cannot be explained by this question).
- Question 14 Explains 64% of the variable variance of the indicators of the sense of integration of people in the community. The value of 0.38 is also the amount of error (the amount of variance that cannot be explained by this question).
- Question 15 Explains 66% of the variance of the variable indicators of the sense of integration of people in the community. The value of 0.16 is the amount of error (the amount of variance that cannot be explained by this question)

It is clear that the lower the error rate, the higher the coefficients of determination gets (and the greater the correlation between the question and the relevant factor). The value of the coefficient of numerical determination is between 0 and 1, which the closer to 1, the greater the value of variance explanation. As the factor loads show, the amount of all factor loads is higher than 0.5, which indicates convergent validity.

Figure (6) Significant of the obtained coefficients and parameters, the model for measuring the latent variables (after the amount of social relations) shows that all the obtained coefficients are significant. Significant test values greater than 1.96 or less than 1.96 indicate the significance of the relationship. The basis for confirming or rejecting hypotheses (significance of relationships) is to examine the model in the case of significant coefficients. At the 0.05 error level and the two-way test (normal default) the critical values of the numbers are -1.96 and -1.96. If the significant coefficients are greater than 1.96 or less than -1.96, the zero hypothesis is rejected and the supposition one, i.e. the existence of a significant correlation, is confirmed.
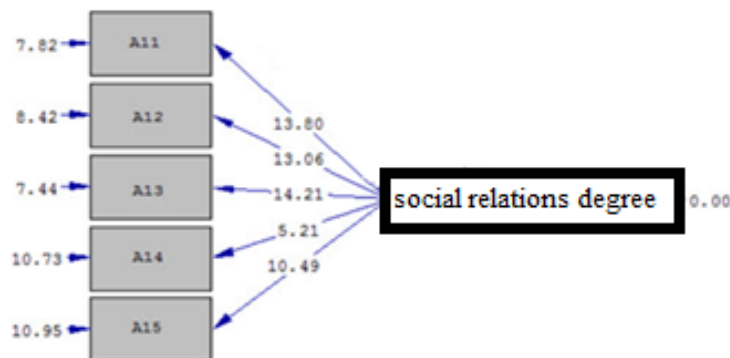

Figure (6) Model of measurements of latent variables in the case of significant coefficients

Table (10) Statistics related to confirmatory factor analysis coefficients after the social relations degree

	Estimate	S.E.	Standardized Estimate	C.R.	P
Question A11> The extent of social relations	.907	6.555	.82	7.82	0.000
Question A12> The extent of social relations	.768	4.869	.85	8.42	0.000
Question A13> The extent of social relations	.542	6.591	.36	7.44	0.000
Question A14> The extent of social relations	.806	8.569	.64	10.73	0.000
Question A15> The extent of social relations	.934	7.128	.66	10.95	0.000

Table (11) Indicators of fit of the structural model after the amount of social relations

Indicator	Df	X2	X2/df	RMSEA	NFI	AGFI	CFI	IFI	GFI
Amount	25	72.75	2.91	0.069	0.92	0.92	0.91	0.91	0.90

The result of dividing the chi-square index by the degree of freedom is 2.91, which is acceptable compared to the critical value of 5 indices. The root mean square index of estimation error (RMSEA) in this model is equal to 0.069. The RMSEA limit is 0.08. The GFI, AGFI and NFI indices are equal to 0.92, 0.91 and 0.92, respectively, which indicate a very good fit, and considering that the values of these indices are above 0.90, they indicate an acceptable fit of the model.

3. **Group interactions based on common and integrated values**

Figure (7) shows the model for measuring latent variables (dimension of group interactions based on shared and integrated values) in standard estimation mode. The factor loads of the model in the standard estimation mode show the effect of each of the variables or items on explaining the variance of the scores of the variable or the main factor. In other words, the factor load indicates the degree of correlation between each observer variable (questionnaire question) and the latent variable (factors).
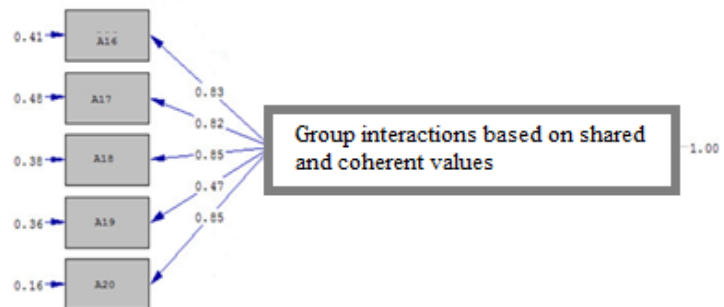

Figure (7) Model of latent variable measurement model of group interactions based on common and integrated values in standard estimation mode

- According to Figure 4-7, the factor loads of each of the research questions can be observed. For example, the factor loads of the questions are 0.83, 0.82, 0.85, 0.47 and 0.85, respectively. In other words:
- Question 16 Explains 83% of the variance of the variable indicators of the sense of integration of people in the community. The value of 0.41 is also the amount of error (the amount of variance that cannot be explained by this question).
- Question 17 Explains 82% of the variance of the variable indicators of the sense of integration of people in the community. The value of 0.48 is the amount of error (the amount of variance that cannot be explained by this question).
- Question 18: 85% of the variance of the variable explains the indicators of the sense of integration of people in the community. The value of 0.38 is also the amount of error (the amount of variance that cannot be explained by this question).
- Question 19 Explains 47% of the variable variance of the indicators of the sense of integration of people in the community. The value of 0.36 is the amount of error (the amount of variance that cannot be explained by this question).
- Question 20: 85% of the variance of the variable explains the indicators of the sense of integration of people in the community. The value of 0.16 is also the amount of error (the amount of variance that cannot be explained by this question).

It is clear that the lower the error rate, the higher the coefficients of determination get (and the greater the correlation between the question and the relevant factor). The value of the coefficient of numerical determination is between 0 and 1, which means the closer to 1, the greater the value of variance explanation is. As the factor loads show, the amount of all factor loads is higher than 0.5, which indicates convergent validity.

Figure 8 shows the significance of the obtained coefficients and parameters. The model of measuring the latent variables (dimension of group interactions based on common and integrated values) shows that all the obtained coefficients are significant. Significant test values greater than 1.96 or less than 1.96 indicate the significance of the relationship. The basis for confirming or rejecting hypotheses (significance of relationships) is to examine the model in the case of significant coefficients. At the 0.05 error level and the two-way test (normal default) the critical values of the numbers are -1.96 and -1.96. If the coefficients of significant are greater than 1.96 or less than -1.96, the zero supposition is rejected and the supposition one, i.e. the existence of a significant correlation, is confirmed.
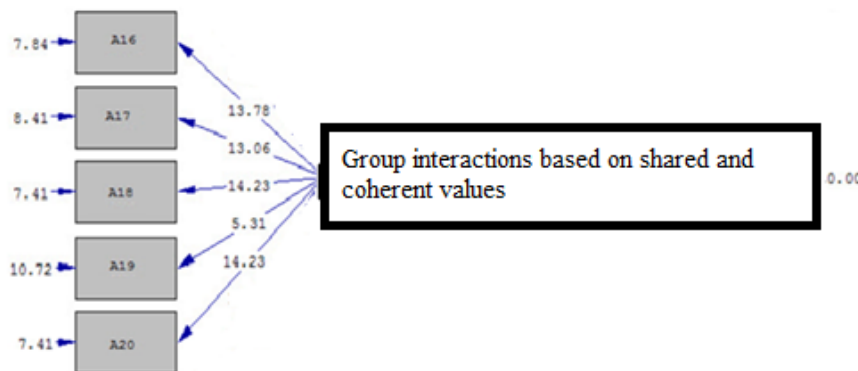

Figure (8) Model of measurements of latent variables in the case of significant coefficients

Table (12) Statistics on confirmatory factor analysis coefficients after group interactions based on shared and integrated values

	Estimate	S.E.	Standardized Estimate	C.R.	P
Question A16> Group interactions based on shared and integrated values	1.002	8.512	.83	13.78	0.000
Question A17> Group interactions based on shared and integrated values	.907	6.509	.82	13.06	0.000
Question A18> Group interactions based on shared and integrated values	.768	4.869	.85	14.23	0.000
Question A19> Group interactions based on shared and integrated values	.512	6.511	.47	5.31	0.000
Question A20> Group interactions based on shared and integrated values	.705	8.569	.85	14.23	0.000

Table (13) Indicators of group interaction model fit based on common and integrated values

Indicator	Df	X^2	X^2/df	RMSEA	NFI	AGFI	CFI	IFI	GFI
Amount	20	62.24	3.112	0.079	0.91	0.90	0.91	0.93	0.92

Although the chi-square index was significant, it can be neglected in cases where the sample size is significant. Instead, instead of the chi-square index, they interpret another index called the chi-square-to-freedom ratio (X2 / df). The product of dividing the chi-square index by the degree of freedom is equal to 0.3, which is acceptable compared to the critical value of 5 indices. The root mean square index of estimation error (RMSEA) in this model is equal to 0.079, which is the allowable limit of RMSEA, 0.08. GFI, AGFI and NFI indices are equal to 0.90, 0.91 and 0.91, respectively, which indicate a very good fit.

Now we have to answer the question on the degree of appropriateness of the proposed model of social cohesion factors related to the sustainable development of the country's badminton elite, which includes: a sense of community integration, friendly and loving relationships, the degree of social relations and group interactions based on shared values. How? To answer this question, a single-sample t-test was used, the results of which are in Table (14).

Table (14) Results of a single-sample t-test to determine the degree of properness of the proposed model

Community average = 3					
Dimensions	Average	The standard deviation	t	df	Sig
Feeling of integration of people in the community	3,6981	0,44473	14,540	241	0,001

Friendly and loving relationships	3,5982	0,6543	15,247	241	.0,001
The extent of social relations	3,6549	0,6659	12,509	241	0,001
Group interactions based on shared and integrated values	3,6992	0,6917	12,334	241	0,001

As shown in Table (14), the t-statistic calculated in all parts of the model shows that the values obtained with a degree of freedom of 241 and an alpha of 0.05 are greater than the critical value of t. Therefore, the zero supposition that there is no difference between the observed means and the mean of community (3) is rejected and it is found that there is a significant difference between the observed means and the mean of community (3). Related to the sustainable development of the country's badminton elite, it has a high reputation by experts and has been approved with 95% confidence. Also, according to the results of one-sample t-test, it can be said that all four key factors of social cohesion related to the sustainable development of the country's badminton elite have a positive and significant effect.

Discussion and conclusion:

The aim of this study was to identify the components of social cohesion related to the sustainable development of the country's badminton elite. According to most researchers and thinkers in the field of cultural studies, social capital, even if it is a single concept, certainly does not have a single instance in all societies, and the requirement of its capital is that it should be formed in any society in accordance with the requirements of that society. National identity, historical background, beliefs, religion, common pains and joys, and the general gains and losses of a society play a crucial role in the production of its social capital, and therefore the amount of social capital in different societies cannot be measured by the same indicators.

Therefore, among the most important obstacles in social cohesion are economic and social barriers. The pervasiveness of sports, especially championship sports, and the importance of its place in international relations, has attracted much attention by governments to the phenomenon of sustainable development of sports elites. Today, development in various dimensions is on the agenda of all countries in the world. Development of a country is a general concept that makes sense with development in different areas. The rapid growth of communication technologies, especially in the field of mass media, has led to the identification of new roles for them every day. Communication is one of the most significant and essential elements of human's social life.

Sustainable development means combining economic, political, social and environmental goals to maximize the well-being of present-day human beings without harming the ability of future generations to meet their needs. In fact, sport is evolving from local concern to international. The sustainable development of the country's sports has become more important today. Social cohesion means that the group maintains its unity and is in harmony with its unifying elements. Solidarity is the sense of reciprocity between several individuals or groups who have awareness and determination and a moral aim. From a sociological point of view,

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social cohesion can be defined as the sense of unity of members of society, friendly and loving relationships, the extent of social relations and group interactions based on shared and integrated values. It is clear that to assess the role of social support and cohesion and its relationship with the dimensions of sustainable development; knowing the dimensions, components and perspectives on supporting social cohesion seems necessary. Activities and relationships in an environment commensurate with its structural context, pave the way for socio-economic dynamics and transformation.

In other words, the set of structures, both environmental-physical and socio-economic, provides a suitable platform for the act of development. Therefore, all organizations have to be in charge of strategic management so that the successful organizations will be able to benefit from science and strategic management for sustainable development and related factors, which in this study are components of social cohesion. According to Putnam, what made the participation of all sections of the people and their savings in the productive processes possible was the pervasive sense of salvation reinforced by a sense of belonging to an integrated community. Significant improvement in economic life and government performance was made possible by the norms and networks of civic participation, which are quite tangible in the present study conferring to the mentioned results.

According to Simmel, processes such as increasing division of labor, excessive rationality, and the like have led to boredom and caution in social relations in metropolitan areas. Simmel argues that the result of such conditions is the instability of relations and the decline of social trust. The idea of degrading the first social relations is still in the focus of sociologists and contemporary sociologists have paid special attention to the concept of social capital to study the quantity and quality of relations and social cohesion in society. Social capital includes assets that exist in the daily life of individuals, such as a sense of understanding, camaraderie and friendship, a sense of empathy and social relationships between individuals and families that form a social unit.

The concern of social cohesion is identity, not attributive and intrinsic identity, but acquired and cultural identity. A job that has been formed with long-term education in terms of discipline and social status, and has formed one's job and welfare position. Social cohesion takes into account all the cultural differences in human relationships. Human relationships are not based on mechanical order, but on organic order. There is a special kind of cohesion and solidarity that is common to the organ in which social consensus, i.e. cohesive social unity, reflects the result of the social differentiation of individuals with each other. The continuity and stability of the political, social and cultural life of any society depends on the cohesion and unity of the members of that society. Iran is an ethnically diverse country. Distinctive characteristics of ethnic groups in Iran are more focused on linguistic and religious components. Among the indicators of cohesion affecting security, indicators of respect for parents and elders to each other, empathy, cooperation in the working season, with a significant level of zero percent, have gained the highest rank. Increasing social cohesion through continuous relationships and participation in associations and collective organizations leads to its strengthening and development. One of the most important obstacles to reform in developing and less developed

countries is that these countries face major social constraints in implementing reforms. These constraints - which Estrella calls "room for maneuver" - are created by the degree of social cohesion in a country. Social cohesion and space for maneuver determine the quality of institutions, which in turn, plays an essential role in the selection and implementation of development plans, in favor of the deprived class and achieving sustainable growth and progress.

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