



Original Research

Assessing the Quality of Technology in the Talent Management System in Individual Sports in Ardabil Province

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ABSTRACT

The purpose of this study was to investigate the quality of talent management technology in individual sports in Ardabil province. This research is descriptive and applied. The statistical population of the study consisted of 142 officials in the field of talent management, experienced coaches and professional athletes of the selected individual sports (weightlifting, wrestling, athletics, fencing, gymnastics and table tennis) delegations of Ardabil province. The sample size was considered equal to the population size and 100 questionnaires, which is about 71% of the population, were collected. The research tool is the standardized questionnaire of Roger et al. (2010) that the face and content validity was confirmed by several experts. Convergent, divergent and combined reliability of the questionnaire were also confirmed. The hypotheses related to the relationship between research variables and model fit were tested by modeling structural equations using SMART PLS3 software and the hypotheses related to the qualitative status of research variables were tested by a binomial test by SPSS26 software. Test findings hypotheses related to the relationships of research variables showed the significance of the effect of goals on the process, resources on the process, opportunities on the process, goals on the results, process and results, process the consequence, results the consequence in the talent management system. Of course, the effect of necessity on process, resources and results, opportunities and results, and necessities on significant results was not reported. Test findings hypotheses related to the status of technology quality of the research variables indicated the appropriate status of the quality technology of the goals in wrestling and the inadequate status of the quality of the technology of the goals in other sports. Also, the quality of resources, opportunities, necessities, process, results and consequences in all related sports was unsatisfactory. Therefore, it can be concluded that sports teams that pay attention to all stages of talent management and have proper performance in the structure and process, this will lead to positive results and consequences.

Keywords: Ardabil, Technology Quality, Talent Management, Individual Sports.

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INTRODUCTION

In sports, it is very important to identify talented people at a young age, select and guide and support them until they reach the highest level of skill and championship (1). A talented sports person is a person who has the required level of physical, physiological and even mental performance of sports. The talent management system has long been of interest to researchers, managers, staffs and governments, and for many years sports scientists have tried to identify the key predictors of talent development in various sports (2). Basic theories have showed that the talent management system is a comprehensive system, which includes subsets of structure, process, results and consequences. The performance of a sports organization depends on the performance of each of these subsets of the talent management system, and there is a close relationship between each of these subsets with each other for the overall performance of the organization. The infrastructure structure consists of goals, resources, opportunities and necessities. This section describes the physical and human characteristics, resources and other characteristics of an institution and its environment. The Goals show characteristics such as the tangibility and specificity of the organization's goals. Opportunities refer to the windows that the talent management system can open and the opportunities that are provided to the organization. Needs are not only related to the individual and professional duties of managers, but also to the structural components of the talent development system. The next part of the process refers to the activities of the participating groups in the talent management system. These activities include planning, organizing, executing and controlling. Planning and implementation includes formulating the main plan for talent development and reviewing scientific perspectives and its implementation. Therefore, strategic planning is the preparation for responding appropriately and in time to internal and external changes in the organization. Sports organizations, given the highly competitive pressure that comes from globalization and the competitive environment of sports, must maintain their competitive advantage and move from micro-management to macro-management while maintaining the survival of the organization. Finally, control involves processes for momentarily evaluating the progress of the talent management system. The results section shows the multi-year performance of the sports organization, the achievement of success and medals of athletes and indicates the output of the talent management system (3, 4, 5). The consequences section is the results that, after a period of activity of the talent management system, show their effects, which are the improvement of the performance of the sports organization, winning medals and championships, the community's attention to that sport, and so on. The quality of performance of sports organizations depends on different parts of the talent management system. A quality talent management system ensures the optimal performance of the organization in various dimensions, especially championship sports (6).

On the other hand, the concept of technology quality can be defined as a set of characteristics such as standardization, flawlessness, proper composition, desirable and constructive durability and stability (7). Quality management is a philosophical perspective - management that has rapidly opened its place in communities and has included services and quality improvement solutions in its program; Efforts to improve quality, which plays a key role in quality development, have increased, and in recent years, quality management promotion systems have evolved rapidly (8). According to the definition of quality management standard organization, quality management is coordinated activities to guide and control organizations in order to improve quality. These activities include leadership, strategic planning, customer orientation, realistic approach to decision making, human resource management, process management and supplier management (9,10). Organizations have realized that in order to have a worthy presence in the global arena and to survive, they must improve their quality (11).

Numerous studies inside and outside the country have dealt with the concept of talent and quality management system and its development, some of which are mentioned: Mozaffari et al. (2012) in a study entitled "Strategies for the development of the Iranian championship sports system" Strategies For the national championship sports system, which includes the institutionalization of specialization in sports, expanding the share of women's sports, increasing the television broadcast of sports other than football, developing a standardization system for sports venues, etc. (12). Alidoust et al. (2014) in a study "reviewed the priorities and strategies for the development of the national judo championship". The research findings showed that controlling and supervising the activities of coaches, planning a sports calendar and holding long-term camps are the most important and following the example of famous countries in the federation are the least important from the experts' point of view in the development of judo championship (13). Hadavi et al. (2015) in an article

"Developing a structural model of total quality management in the Iranian Wrestling Federation and Boards". The results showed that the structure defined for total quality management explains 64.41% of the total variance and the variance percentages for each of the eight factors are for senior management (5.51), customer relations (5.29), supplier relations (3.22), human resource management (3.02), employee behaviors (2.69), design processes (2.68), Production processes (2.43) and quality assurance (2.70) (14). Nazari et al. (2016) "Comparison and prioritization of quality assessment factors of sports talent development system from the perspective of stakeholders" in a study. The results of ANOVA test in this study showed that there is a significant difference between the selected samples in the factors of structure, process and results and the result factor has the highest priority in the sports talent management system. The final result indicates that evaluating the talent development system as an infrastructure for professional and championship sports can make the country's sport successful on the world stage (4). Asadi et al. (2017) in a study "Study of barriers to talent identification in Iranian sports." In this study, 70 obstacles in identifying Iranian sports talent were identified. The result of this study shows that there are many obstacles in the structure of talent identification in the country that need the attention of managers and policy makers in the field of sports (15). Lotfi et al. (2017) in a study called "Structural model of the impact of talent management on human resource productivity and innovation in sports organizations" found that talent management and its dimensions affect human resource productivity and innovation in sports organizations and the result of this Research shows that by using talent management and its dimensions, it is possible to improve the productivity of human resources and thus increase the efficiency of the organization (16). Farid Fathi et al. (2017) in an article "Designing a communication model of talent, innovation and knowledge sharing in the Ministry of Sports and Youth." The results showed that talent management has a direct and significant effect on both variables of knowledge sharing with impact factor (0.56) and innovation with impact factor (0.55) and this model has a good fit according to CFI, GFI, AGFI, RMSEA indicators (17). Dervishi et al. (2015) in an article on "Assessing the quality of Iran's football development system" concluded that among the dimensions of the football talent system, respectively, structure, process and results have played the most role and all three dimensions with the desired amount they were far apart (18). Darbarpanah (1397) in an article "Determining the effective processes on the management of sports talent in the Islamic Republic of Iran", which indicates that the three priority processes, the use and maintenance of sports talent and the discovery and identification of sports talent, evaluation and development Sports talents and 62 components for sports talent management processes have been identified in order of priority in the country, and according to the output of the questionnaire and studies conducted in theoretical foundations, 30 factors have been identified to develop sports talent management (19). Also, Kalani et al. (2016) in a study to "Develop a comprehensive model for talent identification in Iranian championship sports" and the identified categories of coding in this study, including talent identification process, pattern management, environmental factors and key stakeholders were determined, respectively (20). Ford et al. (2013) in an article entitled "Development of Championship Sports" examined the factors influencing the development of championship sports. Findings showed that genetic factors (height, type of muscle fiber), exercise and environmental factors affect the development of championship sports (21). Anwar et al. (2014) conducted a study entitled "Talent Management: Organizational Strategic Priority". The results of this study showed that effective talent management strategies have a positive and significant relationship with organizational performance. Talent management also has a positive and strong relationship with the competitive advantage and performance of the organization (16). Tex et al. (2014) in a study "evaluated the results of the sports talent development system." The results showed that media coverage of sporting events and the existence of clubs and training centers have a positive effect on the development of sports talent. Therefore, it can be concluded from this research that in order to develop the talent system in championship sports, one should not be satisfied only with the results and should focus on the whole management process (22). Martin (2015) in a study entitled "Talent Management: Preparing a Skilled Workforce Ready" showed that talent preparation and encouragement is a culture for succession and effectiveness of activities in any organization that is concerned with maintaining competitive advantage and market share. Developed countries are ready to accept any change in talent management practices in order to attract human capital (23). Demir and Sartbash (2018) have reviewed "comprehensive quality management programs in federations and sports clubs" in a study. The results showed that quality management processes are effectively implemented in sports federations (24). Myers (2019) in an article entitled "the forgotten role of talent: Integrating preventive behavior into talent management theorizing" concluded that talent management by creating positive responses

such as high organizational commitment and work effort among high-potential employees Talent affects organizational performance. This research presents a new conceptual model that includes three potential relationships in talent management (25). For sports organizations, the talent management system is one of the most important issues. If the talent management system correctly sets goals; There are sufficient financial, human and equipment resources, opportunities, necessities and planning, training, organization, implementation of programs, proper control, as well as support of the community, officials and other strata of the talent management system. would have existed; Good results are obtained through the talent management system for championship sports. The consequences of these appropriate results remain in the organization and society for many years (18). Due to the fact that Ardabil province has medal-winning disciplines in international, asian, world and olympic competitions and the importance of conducting this research due to the priority of thematic selection and time priority for the need of the sports community for talent management system, the need for this research was felt. In this study, the quality of Ardabil individual sports talent management system was investigated. Using this research, we can improve the quality of performance of the talent management system of individual sports in Ardabil province and also have more medals in this province and the whole country.

METHODOLOY

This research has been done according to the applied purpose and according to the descriptive-survey data collection method and with the method of structural equations based on partial least squares and binomial test. The purpose of this study was to review and present a comprehensive model of talent management system for individual sports in Ardabil province in order to improve the quality of performance in the field of talent management. The statistical population of the present study, due to the specialization of the research subject, officials and experts in the field of talent management, top coaches (grade 1 and above) and professional athletes (with medals in international, asian, world, olympic competitions) of individual sports delegations in Ardabil province (weightlifting, wrestling, athletics, fencing, gymnastics and table tennis) There are 142 people who have been purposefully selected. The criterion for selecting sports disciplines in this study is the regular participation of disciplines these competitions.

stic sports leagues and asian and world competitions, and the criterion for the success of sports disciplines is the acquisition of medals and the multi-year performance of disciplines in these competitions. The statistical sample of the study was considered equal to the statistical population that 100 samples answered the questionnaire and the return percentage of the questionnaire was about 71%. This number consisted of 30 officials in the field of talent management, 40 experienced coaches and 30 professional athletes in individual sports in Ardabil province. Because a related questionnaire tool already existed in previous research and its validity and reliability were measured and standardized, a questionnaire tool was used in this study. For this purpose, the standard questionnaire of Elric Roger et al. (2010) was used, which is based on the likert five-choice spectrum (5). The questionnaire was reviewed with the opinions of physical education professors and experts in related individual sports, and the consequence variable was added to the questionnaire. Finally, 41 questions including four variables: structure (goals, resources, opportunity, necessity), process, results and consequence were presented in the questionnaire. To determine the validity of the questionnaire and the items presented in the research design, the questionnaire was provided to 4 professors of physical education, 3 experts of sports teams, 3 top coaches and 3 professional athletes from related individual sports, and its face and content validity was confirmed. Structural equation modeling with SMARTPLS3 software was also used to determine convergent and divergent validity. To determine the reliability of the questionnaire, the combined reliability was obtained by SMART PLS3 software for each of the variables above 0.7 and the reliability of the questionnaire was confirmed, which is stated in the research findings. According to the chinese article, when a combined reliability is used in a study to determine the reliability of the questionnaire, the result is complete and acceptable and there is no need to report Cronbach's alpha (26). An electronic questionnaire was provided to the research participants in coordination with the individual sports delegations of Ardabil province. Hypotheses related to the relationship between research variables and model fit have been tested by modeling structural equations based on partial least squares. In this method, model fitting is performed in three ways: measuring model fitting, structural model fitting and general model fitting in SMARTPLS3 software. Also,

hypotheses related to the quality status of research variables were tested by a two-sentence test with SPSS26 software.

RESULTS

Demographic characteristics of the samples participating in the study by gender, age, degree, field of study, sport and field of activity, highest level of athletes' play, coaching degree of coaches and history of activity are reported in table 1.

Table 1. Demographic characteristics of the samples

	Demographic characteristics	Abundance	Frequency
Gender	Female	23	% 23
	Man	77	%77
Age	Under 25 years	4	%4
	26 to 35 years	29	%23
	36 to 45 years	55	%55
	46 to 55 years	11	%11
	56 years and up	1	% 1
Grade	Associate Degree	12	% 12
	Masters	60	%60
	Master and above	28	%28
Field of study	Physical Education	44	%44
	Non Physical Education	56	%56
The highest level of athletes' game	international	5	%5
	Asian	6	% 6
	Global	12	% 12
	Olympic	5	% 5
Degree of coaching coaches	Degree 1	26	%26
	National	14	% 14
	international	2	%2
Experience	Under 13 years	15	% 15
	14 to 17 years	47	%47
	18 years and up	38	%38

In the structural equation method based on partial least squares, the fit of the model is examined through three criteria. The first criterion for evaluating model fit is the fit of the measurement model including the reliability and convergent validity of the model. To evaluate the reliability, the combined reliability and factor load coefficients are used and to evaluate the convergent validity of the research model, the average variance of the extracted variance is used. Table 2 reported the results of the factor load coefficients of each of the research items.

Table 2. Results of factor load coefficients

Factor	Questions	Factor load	Factor	Questions	Factor load	Factor	Questions	Factor load	Factor	Questions	Factor load
Goals	Q1	0.886	//	Q12	*	//	Q23	0.657	//	Q34	*
	Q2	0.909		Q13	*		Necessity	Q24		0.838	Q35
	Q3	0.818		Q14	0.819	Process		Q25		0.812	Q36
	Q4	0.711		Q15	0.734		Results	Q26		0.780	Q37
Resources	Q5	*	Q16	*	Cultural	Q27		0.707	Q38	0.833	
	Q6	*	Q17	0.842		Q28		0.715	Q39	0.759	
	Q7	*	Q18	0.711		Q29		0.768	Q40	0.922	

	Q8	0.677		Q19	0.642		Q30	*		Q41	0.945
	Q9	0.589		Q20	*		Q31	*			
	Q10	0.696		Q21	0.744		Q32	0.788			
	Q11	0.729		Q22	*		Q33	0.794			

* Items that were removed from the research process due to inappropriate factor loading

In the above table, all the numbers of factor load coefficients of the items that make up the modified structural model are greater than 0.4, which indicates the appropriateness of this criterion. Table 3 reported the results of the combined reliability and convergence validity criteria of the latent variables of the research.

Table 3. Results of combined reliability and convergence validity of latent research variables

Concealed variables	Combined reliability coefficient	Convergent validity of the model
		Mean extraction variance
Goals	0.901	0.696
Resources	0.858	0.505
the opportunity	0.852	0.537
Necessity	0.810	0.681
Process	0.899	0.560
Results	0.871	0.629
Consequences	0.931	0.872

Combined reliability has been reported to be more than 0.7, so it is possible to confirm the appropriateness of the reliability of the research and considering that the mean value of the extracted variance is more than 0.5, the convergent validity of the research is confirmed. Therefore, based on the research findings, the fit of the research measurement model is confirmed. Also, convergent validity, divergent validity has been used to examine the validity. Divergent validity was measured using diagnostic validity. In the second root diagnostic validity, the mean variance extracted for each factor should be greater than the correlation values of that factor with other factors (27). Table 4 reported the acceptability of the diagnostic validity of each factor, based on which the divergent validity of the research can be confirmed.

Table 4. Diagnostic validity

Factor	Goals	Necessity	Process	Opportunity	Resources	Results	Consequences
Goals	0.834						
Necessity	0.403	0.825					
Process	0.575	0.595	0.748				
Opportunity	0.513	0.666	0.722	0.733			
Resources	0.408	0.537	0.707	0.643	0.711		
Results	0.561	0.451	0.672	0.614	0.474	0.793	
Consequences	0.644	0.411	0.590	0.507	0.429	0.550	0.934

The second criterion for examining the fit of the model is the fit of the structural model of the research, which can be done by evaluating the coefficient of determination or R² to the endogenous latent variables of the model. Three values of 0.19, 0.33 and 0.67 are considered as the criterion values for weak, medium and strong values of R². Table 5 reported the R² values of the model endogenous latent variables.

Table 5. R2 values of the model endogenous latent variables

Concealed variable	R ²
Process	0.669
Resources	0.522
Consequences	0.391

Based on the results of Table 5, the strong fit of the structural model of the research is also confirmed. The third model for model fit is the overall model fit, which is represented by the GOF criterion. Three values of 0.01, 0.25 and 0.36 are introduced as weak, medium and strong values for GOF and are calculated by the following formula:

$$GOF = \sqrt{\text{communalities} \times R^2}$$

Communalities. : Is obtained from the average of the common values of the hidden variables of the research.

Table 6. General GOF model fit

Concealed variables	Communality	R ²
Goals	0.476	-
Resources	0.307	-
Opportunity	0.396	-
Necessity	0.115	-
Process	0.401	0.699
Results	0.376	0.522
Consequences	0.474	0.391
Average	445.2	1.582
GOF	0.429	

According to the values obtained for GOF, the strong fit of the general research model is confirmed.

Figure 1 reported the structurally modified model of the research along with the path coefficients

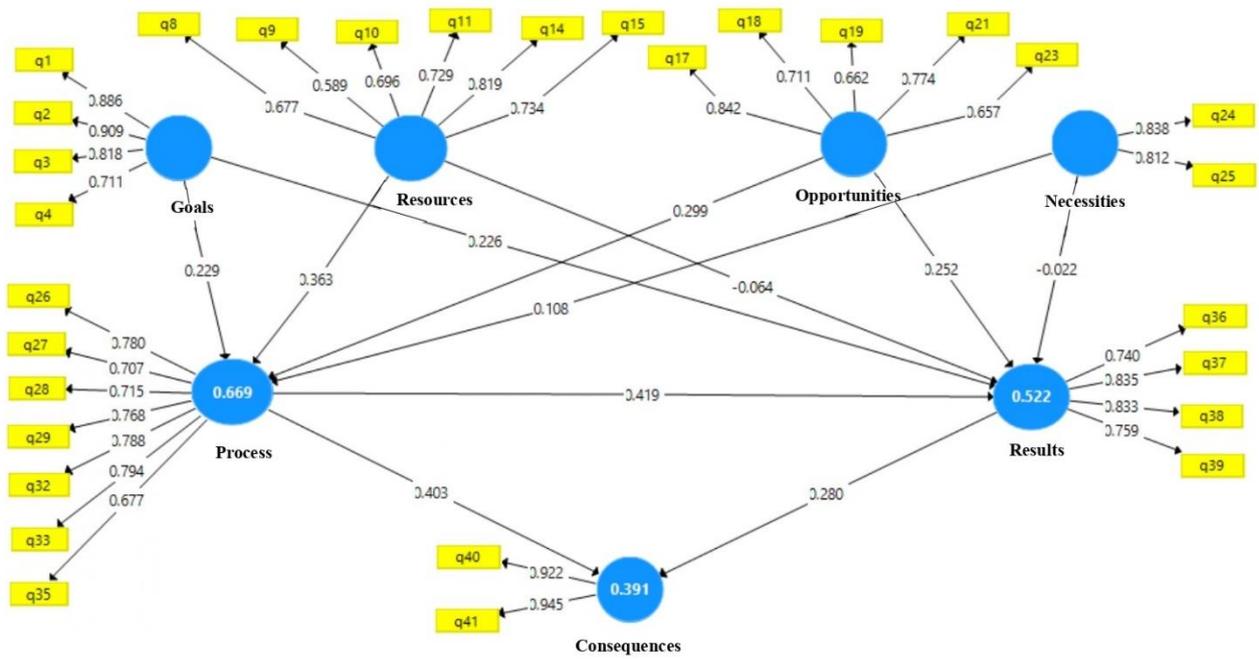


Figure 1. Modified structural model with path coefficients

Figure 2 also reported the structurally modified model of the research with significant coefficients

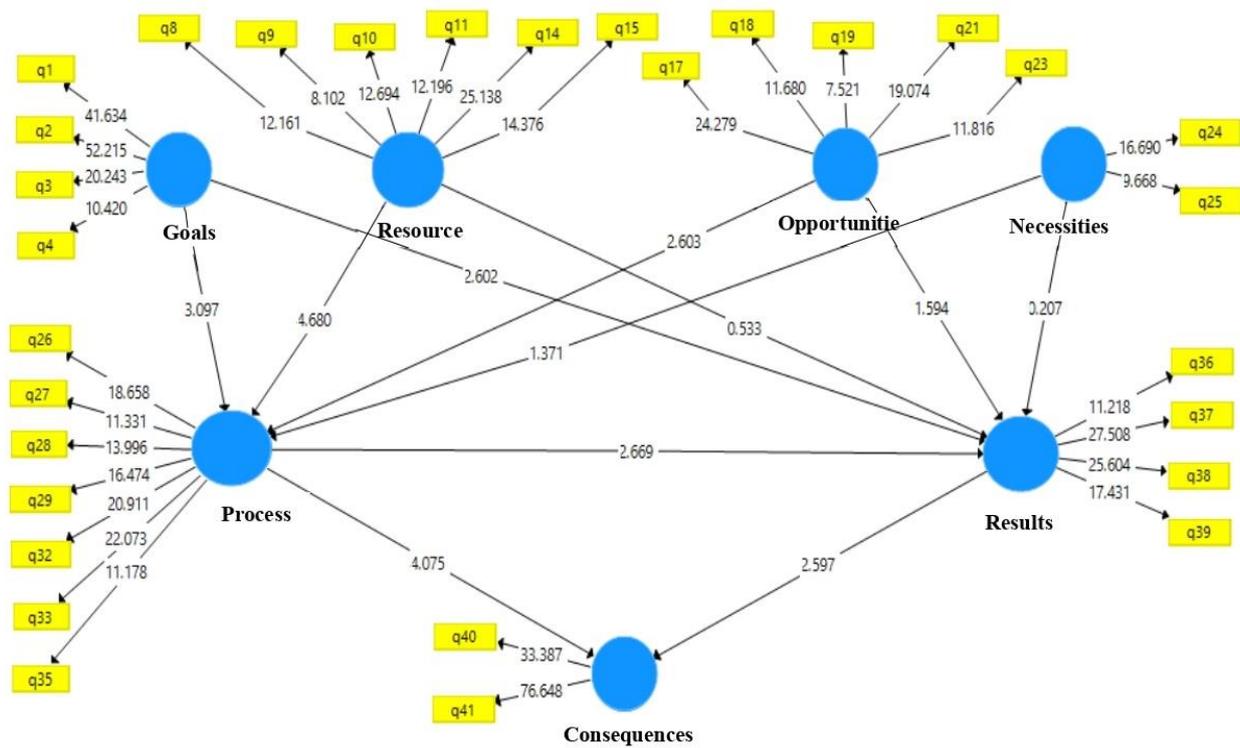


Figure 2. Modified structural model with significant coefficients

Evaluation of research hypotheses is done by examining the paths of the structural model; In such a way that each path represents one of the hypotheses. In each of the paths where the significance coefficient is reported to be greater than the absolute value of 1.96, its significance is confirmed at the 95% confidence level. Table 7 reported the path coefficients, significance coefficients and the results of the research hypotheses.

Table 7. Path coefficients, significance coefficients and results of hypotheses 1 to 5 of the research

Hypothesis	Causal relationships between research variables		Path coefficient (β)	meaningful (T-Value)	Test result
Relationship between structure and process	Sub-hypothesis 1	Goals \longrightarrow Process	0.229	3.097	Reject the null hypothesis
	Sub-hypothesis 2	Resources \longrightarrow Process	0.363	4.680	Reject the null hypothesis
	Sub-hypothesis 3	Opportunities \longrightarrow process	0.299	2.603	Reject the null hypothesis
	Sub-hypothesis 4	Necessities \longrightarrow Process	0.108	1.371	Confirmation of the null hypothesis
Relationship between structure and results	Sub-hypothesis 1	Goals \longrightarrow Results	0.226	2.602	Reject the null hypothesis
	Sub-hypothesis 2	Resources \longrightarrow Results	-0.064	0.553	Confirmation of the null hypothesis

	Sub-hypothesis 3	Opportunities → Results	0.252	1.594	Confirmation of the null hypothesis
	Sub-hypothesis 4	Necessities → Results	-0.022	0.207	Confirmation of the null hypothesis
Relationship between process and results	Process → Results		0.419	2.669	Reject the null hypothesis
Relationship between process and Consequences	Process → Consequences		0.403	4.075	Reject the null hypothesis
Relationship between results and Consequences	Results → Consequences		0.280	2.597	Reject the null hypothesis

Table 8. Mean, sig coefficient and results of hypotheses 6 to 9 of research at significance level = 0.05 α

Status of variables		Sports	Average	Sig	Test result
Structure	Goals	weightlifting	3.270	0.268	Confirmation of the null hypothesis
		wrestling	3.416	0.005	Reject the null hypothesis
		track and field	3.125	0.284	Confirmation of the null hypothesis
		swordsmanship	3.311	0.467	Confirmation of the null hypothesis
		gymnastics	3.659	0.029	Confirmation of the null hypothesis
		table tennis	3.075	0.166	Confirmation of the null hypothesis
	Resources	weightlifting	2.666	0.154	Confirmation of the null hypothesis
		wrestling	2.493	0.184	Confirmation of the null hypothesis
		track and field	2.666	0.329	Confirmation of the null hypothesis
		swordsmanship	2.287	0.119	Confirmation of the null hypothesis
		gymnastics	2.272	0.004	Confirmation of the null hypothesis
		table tennis	2.666	0.167	Confirmation of the null hypothesis
	Opportunity	weightlifting	2.656	0.009	Confirmation of the null hypothesis
		wrestling	2.474	0.309	Confirmation of the null hypothesis
		track and field	2.087	0.003	Confirmation of the null hypothesis
		swordsmanship	2.309	0.004	Confirmation of the null hypothesis
		gymnastics	2.036	0.030	Confirmation of the null hypothesis
		table tennis	1.820	0.167	Confirmation of the null hypothesis
	Necessity	weightlifting	2.300	0.009	Confirmation of the null hypothesis
		wrestling	2.463	0.042	Confirmation of the null hypothesis
track and field		2.843	0.167	Confirmation of the null hypothesis	
swordsmanship		2.500	0.004	Confirmation of the null hypothesis	
gymnastics		2.409	0.030	Confirmation of the null hypothesis	
table tennis		2.300	0.167	Confirmation of the null hypothesis	
Process	weightlifting	2.594	0.274	Confirmation of the null hypothesis	
	wrestling	2.793	0.309	Confirmation of the null hypothesis	
	track and field	2.741	0.329	Confirmation of the null hypothesis	
	swordsmanship	2.324	0.030	Confirmation of the null hypothesis	
	gymnastics	2.727	0.269	Confirmation of the null hypothesis	

	table tennis	2.114	0.006	Confirmation of the null hypothesis
Results	weightlifting	2.670	0.154	Confirmation of the null hypothesis
	wrestling	3.116	0.250	Confirmation of the null hypothesis
	track and field	2.734	0.527	Confirmation of the null hypothesis
	swordsmanship	2.295	0.119	Confirmation of the null hypothesis
	gymnastics	2.477	0.030	Confirmation of the null hypothesis
	table tennis	1.950	0.046	Confirmation of the null hypothesis
Consequences	weightlifting	2.680	0.074	Confirmation of the null hypothesis
	wrestling	2.907	0.250	Confirmation of the null hypothesis
	track and field	2.562	0.167	Confirmation of the null hypothesis
	swordsmanship	2.500	0.004	Confirmation of the null hypothesis
	gymnastics	2.409	0.004	Confirmation of the null hypothesis
	table tennis	2.450	0.618	Confirmation of the null hypothesis

DISCUSSION AND CONCLUSION

The purpose of this study is to investigate the quality of talent management technology in individual sports in Ardabil province. The structural equation model based on partial least squares shows a significant relationship between goals and process and this relationship has a positive effect. So that the higher the quality of the goals, the higher the quality of the technology of the talent management system process. This result is consistent with the results of research by Lotfi et al. (2017); Because they also acknowledged that the higher the quality of goals, the higher the quality of processes (17). Also, the model of structural equations based on partial least squares showed a significant relationship between resources and process, which has a positive effect. The more quality resources an organization has, the better it performs in its operational processes. This result is consistent with the results of Alidoost et al. (2014). Because they also believe; The resources that the organization has at its disposal, such as holding sports camps, good coaches, etc., have a positive effect on sports education processes, and the higher the quality of these resources, the better the quality of the processes (6).

The model of structural equations based on partial least squares showed a significant relationship between opportunity and process variables and this relationship has a positive effect. The more and better the opportunities that the organization has, such as the existence of a sponsor, media support and officials, the higher the quality of executive processes. This result is consistent with the research of Tex et al. (2014); Because they also showed that opportunities are a privilege for the organization by which the organization improves its processes (22). But the model of structural equations based on partial least squares does not showed a significant relationship between necessities and process. The structural equation model based on partial least squares showed a significant relationship between the goal variable and the Consequences variable. This effect has a positive relationship. So that the higher the quality of the goals, the higher the quality of the results of the talent management system. This result is consistent with the research of Anwar et al. (2014); Because they also stated that the higher the quality of the organization's goals, the better the results that the organization achieves (16). But the model of structural equations based on partial least squares does not showed a significant relationship between the source variable and the results. The result is contrary to the results of Ford et al. (2013). Because they stated that the more resources of the organization, the better the results (21). The discrepancy between these studies and the present study may related to the fact that organizations with limited resources can compensate for this weakness by focusing on other stages of talent management and improving them, such as goals, opportunities, necessity, process, and the results earn well.

The structural equation model based on partial least squares does not showed a significant relationship between the opportunity variable and the results. This result is consistent with the results of the research of Mozaffari et al. (2012) (12) and is contrary to the results of Myers (2019). Because he showed that the more opportunities and quality of the organization, the higher the quality of the results it achieves (25). The gap between this research and the present study may due to the fact that organizations that do not have many external opportunities have been able to achieve good results by improving their internal performance and strengths. Also, the structural equation model based on partial least squares does not showed a significant relationship between the necessity variable and the results. This result contradicts the research of Asadi et al. (2017).

Because they have stated in their research that there is a need for talent development (15); But in this study, it was found that good results can be achieved without necessities. The discrepancy between these two studies can be related to the fact that organizations that do not have full access to the necessities compensate for this weakness by investing in other strengths and facilities and achieve good results.

The model of structural equations based on partial least squares showed a significant relationship between the process variable and the consequence variable, and this effect has a positive effect so that the higher the quality of the talent management system processes (planning, organizing, execution, control) the quality of results also increases. This result is consistent with the results of Hadavi et al. (2015). Because they also acknowledged that the better the quality of the processes, the better the results (14). Also, the structural equation model based on partial least squares showed a significant relationship between process and consequence, and this effect has a positive effect, so that the higher the quality of the talent management system processes, the higher the quality of the consequence. The better the quality of the processes, the better the consequences. The purpose of the talent quality system process is to improve the quality of the talent management system process; In order to have quality processes, the board can achieve good results in championship sports. The structural equation model based on partial least squares showed a significant relationship between the result and consequence variables and this effect has a positive effect. So that the higher the quality of results, the better the consequences that appear in the organization in the long run, such as improving performance in championship sports and satisfaction with the performance of the talent management system. This result is consistent with the results of Demir and Sartbash (2018). Because they also showed in their research that organizations that have achieved good results, the consequences will remain in the long run and these consequences are of good quality (24).

The binomial test shows that the quality of the goals in wrestling is good and in the sports of weightlifting, athletics, fencing, gymnastics and table tennis. Also, the quality of resources, opportunities, necessities, process, results and consequences in all selected sports in Ardabil province is not in a good condition.

The talent management system has different parts. For a sports talent management system to be successful, it must pay attention to the quality of all its components, including goals, resources, opportunities, necessity and process, results and Consequence. The goals, resources, opportunity and necessity sections show the characteristics of the organization. The strategic goals of the organization, available resources, opportunities ahead and the needs of the developed talent management system, play an important role in the structure of the talent management system and the quality of all these factors should be considered. In this study, it was found that individual sports teams that have better goals, more resources, more opportunities and certain needs, perform better in executive processes, and also sports teams that have better goals, show better results. But sports teams that have fewer resources, opportunities and needs can also achieve good results, and this shows that they can makeup for some of these shortcomings by working in other areas. It is recommended that the directors of sports teams, together with their coaches and staff, set goals related to the talent management system in the long and short term and continue their activities regarding the talent management system based on these goals. Sports teams should also use the financial resources at their disposal to improve the talent management system, increase interaction with schools to increase the human resources of the athlete. Hold coaching classes to have enough coaches and hold enough training camps to train athletes. In terms of opportunities, sports boards should try to negotiate with sponsors and get their attention to support the board's talent management system. Invite them to support the board's talent management system through the media and conversations with key people and provincial officials. As required, sports committees should develop specific rules and frameworks for the talent management system. Because this is one of the essentials.

The talent management system processes includes planning, organizing, executing, and controlling. Planning involves programming and execution, that is, the implementation of plans. At this stage, control is also done, so that if the talent management system has a shortcoming, they can fix it. In this study, it was found that sports teams that perform well in their processes, also achieve good results. Sports teams must go through all the stages of the talent management system. In such a way that they plan according to the new methods of the talent management system have a proper organization.

The talent management system processes include planning, organizing, executing, and controlling. Planning involves programming and execution, that is, the implementation of plans. At this stage, control is also done, so that if the talent management system has a shortcoming, they can fix it. In this study, it was found that sports teams that perform well in their processes, also achieve good results. Sports teams must go through all the

stages of the talent management system. In such a way that they plan according to the new methods of the talent management system and have proper organization. Provide education to people in a variety of ways around the world. Finally, they have control over the process so that if they have any shortcomings at this stage, they will be eliminated. The results are linked to the success of athletes in international, asian, world and olympic competitions and show the output of the talent management system. In this study, it was found that sports teams that achieve better results in these competitions, the consequences of which include improving the multi-year performance of the team in championship sports and satisfaction with the performance of the talent management system in the long run, show better quality. A successful sports team is introduced in its field of sports. It is recommended that sports teams try to achieve quality results and medals and achieve the goals of the system, with quality consequences such as improving the performance of the talent management system in recent years and also to gain public satisfaction with the performance of their talent management system. Sports that take all of this into account and enhance the quality of each factor; They can achieve great success in international, asian, world and olympic sports, and ultimately have a quality talent management system.

It should be acknowledged that the studies conducted on the quality of the entire sports talent management system in Iran are few and only in these studies the stage of talent identification has been considered. However, for the success of championship sports, the quality of all these steps in the talent management system and the relationship between them are important, and sports teams must have the necessary planning for the quality of all these areas. Therefore, it can be concluded that sports teams that pay attention to all stages of talent management and have proper performance in the structure and process, this will lead to positive results and consequences.

REFERENCES

1. Ibrahim Kh, Hallaji, M. Introduction to the basics and process of sports talent identification. Tehran: Bamdad Book Publishing;2007.
2. Régnier G, Salmela J, Russell SJ. Talent detection and development in sport. Handbook of research on sport psychology. 1993:290-313.
3. Kazemipour H. Talent management in sports. Strategic Studies of Sports and Youth. 2012;6 (17&18): 107 -118.
4. Nazari F, Yousefi B, Eydi H. Comparing and Prioritizing the Quality Assessment in Factors of Sport Talent Development Systems from Stakeholder's Standpoint. Sport Management and Development. 2016;5(1):19-35.
5. Röger U, Rütten A, Heiko Z, Hill R. Quality of talent development systems: results from an international study. European Journal for Sport and Society. 2010;7(1):7-19.
6. Saatchian V, Hadavi SF, Akbari y, Hossein Safari M. Strategies and Consequences of Communication Management in the Faculties of Physical Education and Sports Sciences and the Executive Sector of the Sports Industry. Strategic Studies in Sports and Youth. 2015;14 (27): 193-208.
7. Soltani I. Educational supervision is the bedrock of educational quality. Tehran: Arkan Publications;2004.
8. Bahmanyar M, Sohrabi P. Comparison of the readiness of the general departments of physical education in North, Razavi and South Khorasan provinces in accepting total quality management. Tehran: 6th National Conference of Physical Education and Sports Science Students of Iran, Tehran: Research Institute of Physical Education and Sports Sciences; 2011.
9. Sila I. Examining the effects of contextual factors on TQM and performance through the lens of organizational theories: An empirical study. Journal of Operations management. 2007;25(1):83-109.
10. Sun H, Cheng T-K. Comparing reasons, practices and effects of ISO 9000 certification and TQM implementation in Norwegian SMEs and large firms. International Small Business Journal. 2002;20(4):421-42.
11. Droudian AA, Shahbazi M. Acceptance of TQM principles in the Physical Education Organization and the Olympic Committee of the Islamic Republic of Iran. Sixth National Conference of Physical Education

- and Sports Sciences Students of Iran, Tehran: Research Institute of Physical Education and Sports Sciences; 2011.
12. Mozaffari SA , Elahi A, Abbasi SH, Ahadpour H , Rezaei ZA. Strategies for the development of the Iranian championship sports system. *Sports Management Studies*.2012; 2 (13): 48-33.
 13. Alidoust Ghahfarokhi E, Sajjadi SN, Mahmoudi A, Sa'atchian V. The Evaluation of Development Priorities and Strategies of Judo Championship in Iran. *Journal of Sport Management*. 2014;6(2):231-46.
 14. Hadavi F, Farahani A, Seifi H .Structural Model of Total Quality Management in Iranian Wrestling Federation. *Strategic Studies on Youth ans Sports*. 2015;14(29):215-29.
 15. Asadi N, Goudarzi M, Sajadi S N, Alidoust Ghahfarrokhi E. An Investigation of the Obstacles to Talent Identification in Sports in Iran. 3. 2017; 5 (18) :23-32.
 16. Anwar A, Nisar QA, Khan NZA, Sana A. Talent management: Strategic priority of organizations. *International Journal of Innovation and Applied Studies*. 2014;9(3):1148.
 17. FaridFathi M, Rouzbahani M, Farahmand F, Kazem B. Designing Relationship Model of talent management , Innovation and Knowledge sharing in Yoths and Sport Ministry. *Scientific Journal Of Organizational Behavior Management in Sport Studies*. 2017;4(2):113-23.
 18. Darvishi A, Dousti M, Razavi S M H, Farzan F. Assessing the Quality of Iran Football Talent Development System. 3. 2018; 6 (22) :65-79.
 19. Darbar Panah F. Determining the effective processes on sports talent management in the Islamic Republic of Iran. Master Thesis, Payame Noor University, Central Tehran;2018.
 20. Kalani A, Elahi A, Sajjadi SN, Zareian H. Developing a comprehensive model of identify talent in Iranian championship sport. *Research on Educational Sport*. 2020;8(20):33-50.
 21. Ford PR, Hodges NJ, Williams AM, Kaufmann S, Simonton D. Creating champions—The development of expertise in sport. *The complexity of greatness*. 2013:391-413.
 22. Taks M, Green BC, Misener L, Chalip L. Evaluating sport development outcomes: The case of a medium-sized international sport event. *European sport management quarterly*. 2014;14(3):213-37.
 23. Martin A. Talent management: Preparing a “Ready” agile workforce. *International Journal of Pediatrics and Adolescent Medicine*. 2015;2(3-4):112-6.
 24. Demir A, Sertbaş K, editors. Total quality management applications in sports and an application on Kocaeli amateur sports club federation sports clubs. *SHS Web of Conferences*; 2018: EDP Sciences.
 25. Meyers MC. The neglected role of talent proactivity: Integrating proactive behavior into talent-management theorizing. *Human Resource Management Review*. 2020;30(2):100703.
 26. Chin WW. The partial least squares approach to structural equation modeling. *Modern methods for business research*. 1998;295(2):295-336.
 27. Nevitt J, Hancock GR. Performance of bootstrapping approaches to model test statistics and parameter standard error estimation in structural equation modeling. *Structural equation modeling*. 2001;8(3):353-77.

چکیده فارسی

بررسی کیفیت سیستم مدیریت استعداد در رشته‌های ورزشی انفرادی استان اردبیل

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هدف از پژوهش حاضر، بررسی کیفیت مدیریت استعداد در رشته‌های ورزشی انفرادی استان اردبیل بود. این پژوهش توصیفی و کاربردی است. جامعه آماری پژوهش را مسئولان حوزه مدیریت استعداد، مربیان زده و ورزشکاران حرفه‌ای هیات‌های ورزشی انفرادی منتخب استان اردبیل (وزنه برداری، کشتی، دو و میدانی، شمشیربازی، ژیمناستیک و تنیس روی میز) به تعداد ۱۴۲ تشکیل می‌دادند. حجم نمونه برابر با حجم جامعه در نظر گرفته شد و ۱۰۰ پرسشنامه که حدود ۷۱ درصد جامعه می‌باشد، جمع‌آوری گردید. ابزار پژوهش، پرسشنامه استاندارد شده روجر و همکاران (۲۰۱۰) می‌باشد که روایی صوری و محتوایی توسط چند نفر از افراد متخصص، تایید شد. همچنین روایی همگرا، واگرا و پایایی ترکیبی پرسشنامه نیز مورد تایید قرار گرفت. آزمون فرضیه‌های مربوط به روابط متغیرهای پژوهش و برازش مدل با مدل سازی معادلات ساختاری وسیله نرم افزار SMART PLS3 و آزمون فرضیه‌های مربوط به وضعیت کیفیت متغیرهای پژوهش با آزمون دوجمله‌ای به وسیله نرم افزار SPSS26 انجام شد. یافته‌های آزمون فرضیه‌های مربوط به روابط متغیرهای پژوهش، حاکی از معناداری اثر اهداف بر فرآیند، منابع بر فرآیند، فرصت‌ها بر فرآیند، اهداف بر نتایج، فرآیند و نتایج، فرآیند بر پیامد، نتایج بر پیامد در سیستم مدیریت استعداد بود. البته اثر ضرورت بر فرآیند، منابع و نتایج، فرصت‌ها و نتایج، ضرورت‌ها بر نتایج معنادار گزارش نشد. یافته‌های آزمون فرضیه‌های مربوط به وضعیت کیفیت متغیرهای پژوهش، حاکی از وضعیت مناسب کیفیت اهداف در رشته‌های کشتی و وضعیت نامناسب کیفیت اهداف در سایر رشته‌های ورزشی بود. همچنین کیفیت منابع، فرصت‌ها، ضرورت‌ها، فرآیند، نتایج و پیامد در تمام رشته‌های ورزشی مربوط دارای وضعیت نامناسب بود. از این رو می‌توان نتیجه گرفت که هیات‌های ورزشی که به همه‌ی مراحل مدیریت استعداد توجه کنند و عملکرد مناسب در ساختار و فرآیند داشته باشند، این موضوع سبب کسب نتایج و پیامدهای مثبت می‌شود.

واژگان کلیدی: اردبیل، کیفیت، مدیریت استعداد، ورزش‌های انفرادی.