



The comprehensive model of training of sports coaches with a competency approach using a structural modeling

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Abstract

Background & Purpose: Today, the purpose of training is not only to transfer knowledge and skills to employees, but also to provide a knowledge environment, to provide the ground for cultivating scientists in organizations. This paper aims to study the literature on comprehensive models of sports educators training in Iran. Therefore, this research is aimed at explaining and modeling the structure of comprehensive educational models of sports educators in Iran with competency approach.

Method: This research was carried out using structural equivalence method and information obtained from a distributed questionnaire among 372 sports trainers participating in educational courses in Ardebil city.

Results: The key indicators of the comprehensive model of the training of sports trainers in this country were formed from the dimensional, process, and outward dimensions. The output factor with the coefficient of 0.78 has the highest importance and the index (0.71), the process (0.64), respectively are in the next rank..

Conclusion: In order to train qualified trainers in the field of sports, designing and conducting training courses for sports educators should lead to the development of their competencies, which will increase the efficiency and performance of instructors in different disciplines.

Keywords: Education, Sport Coaches, Competency

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Introduction

The dynamic context of the 21st century considers training and development as one of the ways to increase national competitiveness (Bolt et al., 2010). It seeks to create innovative initiatives in the use of educational technological tools (Kim et al., 2015), so that the training and development of employees is considered a crucial strategic issue for organizations and is considered as a tool through which organizations determine the extent in which their human assets are considered sustainable capitals (Abbaspour, 2013). In other words, training of employees is like maintaining property and equipment. Tools and equipment need continuous maintenance and adjustment to be more efficient. To maximize the effectiveness and efficiency of the organization members, appropriate training

courses should be prepared for the employees, while familiarizing them with the environment and justifying them based on their needs (Seyed Javadin, 2014). At present, many organizations, regardless of the type and level of formal training of their employees, and due to dynamics in science as well as job requirements, provide them with various and continuous training courses. Investment in employee training has an increasing trend, and organizations increasingly emphasize the expansion of educational activities and providing learning opportunities for all employees at different organizational levels (Saki, 1998) With increasing attention to training, expectations from it have also been improved. The Ministry of Sports and Youth, the General Directorate of Sports of the provinces, federations and sports clubs that organize different training courses every year for different



affairs are not an exemption in this regard.

The training costs of the programs held in these institutions, especially for sports coaches, require limited resources to avoid reworking and spending unnecessary costs and wasting time and wasting human resources by carefully examining the past work process and other sources. Additionally, the content of training courses for sports coaches is not appropriate to their needs and competencies, making the output of training programs ineffective. Nowadays, the aim of training is not only to transfer knowledge and skills to the employees who need it, but it is necessary to provide the conditions for the development of scientists in organizations by providing a knowledge space (Saner et al., 2002). Lack of paying attention to this issue and any neglect in the evaluation of training courses will make these courses non-important for employees or an attempt to use its benefits (Abili et al., 1993). In face of training, many organizations have failed to evaluate each training as a necessity since evaluation has been a formality task with little analysis and useless (Patirka et al., 1999). Thus, a training program for sports coaches can justify its value only when it provides reliable and valid evidence on the effect of training on improving the coaches' performance.

In this regard, one of the issues of the Ministry of Sports and Youth and the General Directorates of Sports and Youth is lack of paying seriousness attention to training, inappropriate evaluation of the effectiveness of training courses and as a result providing inappropriate feedback on the

Table 1: statistical population and sample

1397	Female	Male
Class 1 coaching	7681	2399
Class 2 coaching	539	631
Class 3 coaching	20	52
Total population	11322	
Total sample	372	

Demographic characteristics and research variables were analyzed using descriptive statistics and in SPSS-19 software. Also, data analysis and estimation of the variables were done using inferential statistics. Using the Kolmogorov Smirnov test, the normality of the questionnaire questions was implemented so that if this condition is fulfilled, parametric statistical tests can be used. Also, to test the

results of training, lack of attention to the differences and competencies of coaches, and finally, lack of doing necessary follow-up when it is necessary. By designing the appropriate competency-based training courses, it is possible to recognize the importance and necessity of conducting more and better training courses for sports coaches. This important issue is emphasized through the obtained results. Thus, the present study aims to express the importance of training sports coaches to create value and excellence in sports. Furthermore, the present study aims to explain the concepts and training approaches in relevant organizations systematically and strategically to explain and describe the approach of training based on competency and its challenges in the area of sports.

Methodology

This present study is applied in terms of aim, descriptive in terms of collecting data, and correlational according to the main approach based on determining the causal relationships between research variables. Structural equation method was used to examine the relationships between research variables. The statistical population of the study included 11322 training courses. Among them, 372 people were selected as a sample according to Cochran's formula. To identify the dimensions and factors of the training system of sports coaches in this study, a researcher-made questionnaire was used. This model includes input, process, and output dimensions and has a reliability of 0.91.

hypotheses of the research, LISREL software was used, which is a variance-based path modeling technique and makes it possible to examine the theory and metrics simultaneously.

Results

According to the obtained results, about 14.5% of the respondents are female and 85.5% of the respondents are male. Also, about 1.6% of the respondents had a diploma, about 13.4% had an associate degree, about 52.2% had a bachelor's



degree, about 31.2% had a master's degree, and about 1.6% had a doctorate degree. Based on the results, about 8.6% of the respondents had a coaching history for less than 5 years old, about 16.1% had a coaching history of 5 to 10 years, about 22.6% had a coaching history of 10 to 15 years, about 29% had a coaching history of 15 to 20 years and about 23.7% had a coaching history of more than 21 years. The mean age of the respondents was reported at 34 years. The

Table 2- Descriptive statistics of research variables

Variable	N	Mean	Variance	SD
Input	372	48.3	168.0	410.0
human resources	372	73.2	430.0	655.0
Information Resources	372	47.3	338.0	581.0
physical resources	372	24.3	358.0	598.0
Financial resources	372	94.3	735.0	857.0
Policies and regulations	372	68.3	561.0	749.0
Curriculum	372	84.3	398.0	630.0
Process	372	37.3	20.0	449.0
Implementing training programs	372	42.3	592.0	769.0
Implementation of educational programs	372	48.3	506.0	713.0
Change in knowledge	372	42.3	437.0	660.0
Change in attitude	372	49.3	389.0	623.0
Change in behavior	372	14.3	00.1	00.1
Change in skill	372	28.3	358.0	598.0
output	372	14.3	373.0	610.0
Development of moral competencies	372	31.3	674.0	821.0
Learner satisfaction	372	22.3	724.0	850.0
Organization satisfaction	372	89.2	523.0	725.0

following table shows the descriptive statistics of the research variables. As seen in the table, for the input variable, the mean value and standard deviation of the opinions are 3.48 and 0.410, respectively. For the process variable, the mean value and standard deviation of the opinions are 3.37 and 0.449, respectively. For the output variable, the mean and standard deviation of opinions are 3.14 and 0.610, respectively.

To answer the questions and confirm the research hypotheses, the least squares method was used in Lisrel-8 software. The results of the confirmatory factor analysis for the indicators

related to input, process and output indicate that all the indicators of coaches training model have high factor loading, so they are confirmed.

Table 3: Results of confirmatory factor analysis of research variables

	Variable	Standard coefficient	Facto loading	T-Value	Rank
Input 0.71	human resources	96.0	19.0	39.3	6
	Information Resources	88.0	34.0	37.6	5
	physical resources	88.0	35.0	54.6	4
	Financial resources	80.0	45.0	46.8	3
	Policies and regulations	34.0	61.0	63.17	2



	Curriculum	26.0	86.0	92.18	1
Process 0.64	Implementing training programs	95.0	22.0	92.3	6
	Implementation of educational programs	77.0	47.0	94.8	5
	Change in knowledge	75.0	50.0	47.9	4
	Change in attitude	71.0	54.0	26.10	3
	Change in behavior	59.0	64.0	81.12	1
	Change in skill	33.0	62.0	61.17	2
Output 0.78	Development of moral competencies	74.0	51.0	79.9	3
	Learner satisfaction	46.0	79.0	73.14	1
	Organization satisfaction	65.0	59.0	46.11	2

The fit of the proposed model was used based on a combination of fit indices to determine the adequacy of the fit of the proposed model with the data, as reported in the table below.

Table 5. Measurement model fit indicators

adequacy of the fit of the proposed model with the data, as reported in the table below.

RMSEA	IFI	AGFI	TLI	GFI	RMR	NFI
09.0	81.0	81.0	92.0	00.1	04.0	82.0

The GFI and AFGI indices represent the relative value of variances and covariances explained by the model. Both of these indices vary between zero and one, the closer they are to value of 1, the better the model fit will be. Also, the closer the RMR to zero, the better the model fit will be.

Finally, to examine how the desired model combines fit and parsimoniousness, a very powerful index of the RMSEA was used. It was estimated at 9% in this model, which indicates the appropriate fit and appropriate design of the research plan.

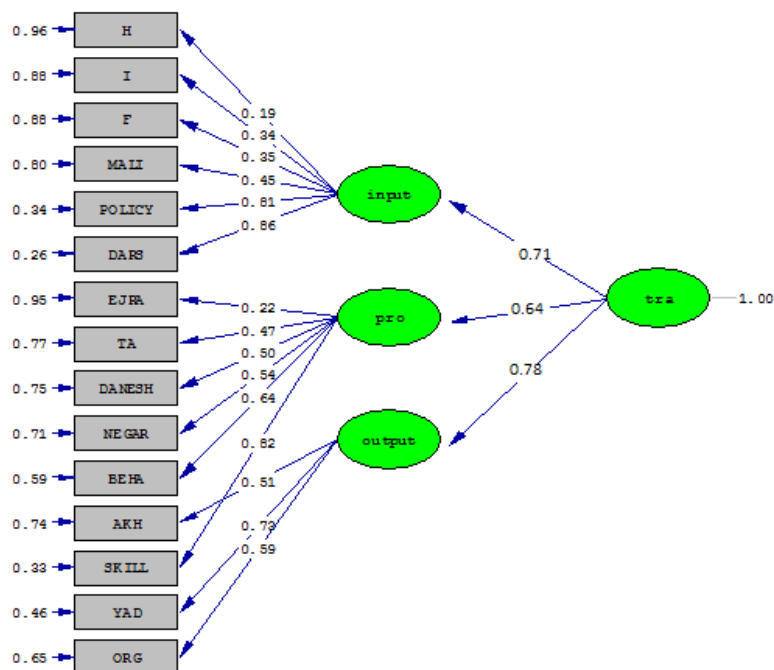


Figure 1: Model based on structural equation modeling

To answer the first question of the research of what are the dimensions and indicators of the training system for sports coaches, confirmatory factor analysis was used. The obtained results show that all indicators measuring the training have a high factor loading and thus are approved. Therefore, the key indicators of the training model for sports coaches are shown in Figure 2. In this model, the output index of the path coefficient load with a value of 0.78 has the most importance, followed by input (0.71), the process (0.64), respectively. Confirmatory factor analysis was used to answer the second, third and fourth questions of the study. The obtained results show that the input dimension of coach training consists of the items of human resources, information resources, physical resources, financial resources, policies and regulations, and curriculum. Since all indicators of the input construct have a high factor loading, they are confirmed. Among them, the "curriculum" factor with a path coefficient of 0.86 and the human resources factor with a path coefficient of 0.19 have the highest and least importance, respectively.

Based on the results of the study, the dimension of the coach training process consists of the factors of "implementation of training programs, implementation of training programs, change in knowledge, change in attitude, change in behavior and change in skill". Among these dimensions, the factor of change in behavior (0.64), change in skill (0.62) and change in attitude (0.54) have the highest importance. The dimension of the output of coach training consists of the factors of "development of moral competencies" (0.51), learners' satisfaction (0.79) and organization satisfaction (0.59). Since all indicators of the output construct had a high factor loading, they are confirmed.

Discussion and Conclusion

No constructive study has been carried out so far to design a comprehensive model for training of sports coaches in Iran with a competency approach. Also, no attention has been paid to this important issue caused and thus less attention has been paid to the competencies of sports coaches in training courses and it has caused many problems in the output of training programs, including inappropriate evaluation of the effectiveness of training courses and providing inappropriate feedback. The result of such training courses has a direct effect on the

growth and excellence of sports in the country. The present study aimed to take a comprehensive and constructive look at the subject to examine the causes and effective factors in the training of coaches, and investigate the importance and role of competencies in the effectiveness of training courses and provide the necessary solutions to improve the current training status. Thus, the aim of this study was to design a comprehensive model for the training of sports coaches in Iran with a competency approach. The conceptual model of the study was developed based on the theoretical literature, and the research questions, and the data were analyzed using Lisrel software. The key indicators of comprehensive training model for sports coaches in Iran consists of the dimensions of output, process and output, the output factor with the path coefficient of 0.78 is the most important and the input (0.71), process (0.64), respectively, were ranked next.

The results of the study also revealed that the input dimension of coaches' training consists of the items of human resources, information resources, physical resources, financial resources, policies and regulations and curriculum, among which the "curriculum" factor with a path coefficient of 0.86 and human resources factor with a path coefficient of 0.19 have the highest and lowest importance, respectively. The dimension of the process of training of coaches consists of the factors of "implementation of training programs, implementation of educational programs, change in knowledge, change in attitude, change in behavior and change in skill". In this regard, the factor of change in behavior (0.64) and change in skill (0.62) and change in attitude (0.54), respectively, have the highest level of importance.

This issue indicates the degree of importance of competency indicators (attitude, behavior and skills) among other factors in the design of the training models. The output dimension of training of courses in this model is also composed of the factors of development of moral competencies (0.51), learners' satisfaction (0.79) and organization satisfaction (0.59). Since all indicators of the output construct have a high factor loading, they are confirmed. The results of previous studies conducted by Gerzin et al. (2015), Azami and Bakhtiari (2014), Memari (2013), Smith (2010), Melton et al. (2010), Banak et al. (2012), Hassi (2012) and Kim (2015) showed



the importance of competencies in the design of training models and each of them examined this category from different dimensions. Azami and Bakhtiari (2013) designed a meritorious comprehensive training model in Naja and identified the desired dimensions, factors and indicators in this area, which is consistent with the results of this study. With the aim of evaluating the professional competences of the coaches of the technical and vocational training centers of Mazandaran, Gerzin referred to the dimensions of the competences of the coaches, including training competencies, professional competencies of coaches, commercialization competencies, ethics competencies and professional behavior. Banak et al. (2012) identified the competencies that are suitable for training of coaches and explained how to improve and develop training programs for coaches.

Based on the results of the study, some appropriate practical recommended are presented: (A) To train expert coaches in the area of sports, the competencies of all sports coaches in different fields should be identified and a database of the competencies needed by the country's sports coaches should be created and provided to the relevant institutions and organizations to design the training courses. (B) Paying attention to behavioral, skill and motivational indicators in the design of training programs for sports coaches in the country should be prioritized. (C) Having a systematic approach to the training programs of coaches and the impact this issue on the output of training programs. (D) Explicit evaluation of training courses and design of forms related to each training course and analysis of its results. (E) Since human resources as one of the data of the training model has a high degree of importance in this study, it is recommended to pay special attention to this issue and select the coaches for training courses according to the needs of each sport. (F) The results of study also showed the high degree of importance of curriculum content in the design of the training model of coaches, so it is recommended that before designing the curricula, the needs of the coaches should be assessed properly and the coaches themselves should participate in the design of the training programs.

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