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EFFICIENCY OF MANAGEMENT OF HUMAN RESOURCES IN SPORT FEDERATIONS OF B&H

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Original research:

Abstract

The aim of this paper is to evaluate management of human resources in state vocational sport federations, sport organizational efficiency, attachment, satisfaction and change of intentions of employees and determination of factors significant for achievement of strategic goals of vocational federations. Sample subjects of this study were 36 state vocational sport federations, which are members of Olympic committee of B&H and representatives of administrative apparatus of those federations. Modified set of variables *Quansah, N., 2013. & Zubair, M. Tahir, Q., Muhammad, R., 2016.*) for assessment of efficiency of management of human resources of state sport vocational federation, is made of 7 components (1. recruitment and selection; 2. compensation and benefits; 3. training and development; 4. employees' engagement; 5. employees career planning; 6. evaluation of efficiency of employees; 7. protection of employees) and 33 variables, in total. Research data are collected by technique of questionnaire. Normality of distribution of data is tested by Kalmogorov- Smirnov test, while reliability of measure scale of researched variables is evaluated by Cronbach alpha coefficient. Keiser-Mayer-Olkin (.584) and Bartlett test of sphericity (.000) confirmed marginal level of benefits of main components and Varimax rotation and obtained number and structure of factors, which determinate level of organizational efficiency in state vocational sport federations. Gutman- Kaiser Criterion is used for selection of number of main components. Seven main components, which explain overall manifest area with 83,7% of common variance, are isolated by factor analysis, in analyzed area of active practice of management of human resources in sport organizations. Projection of factor load was above 60 and make criterion for selection of variables, which are the most representative for that factor. In this way, seven factors, which describe key activity of active practice of management of human resources, in analyzed vocational sport federations in B&H, are isolated and defined in the following way: F1. Planning of adequate competencies, evaluation and rewarding human resources in sport organization F2. Improvement of quality of work in sport organizations F3. Creating appropriate approach in rewarding and solving conflict F5. Positive organization climate and freedom of employees in their initiatives F6. Motivation of employees F7. Level of information of qualifications necessary for job application. All factors present elements, which are necessary in order for employees to be efficient in their work and to support the need for efficient usage of human resources and strategically adjusted business functions in order to improve business results and give competitive advantage. These factors can also help in organizations in achievement of defined strategic results and improvement of performances of employees and business results, as well.

Keywords: human resources, sport federations, factor analysis, efficiency

Introduction

Management of human resources is very important mean, which can improve favorable result of that management. Impact of performance of management of human resources depends on reaction of employees on management of human resources. Therefore, the impact is moving in direction of perception of practice of management of human resources from the perception of an employee, Guest (2002). It is proven that presence of strong practice of: recruitment and selection, promotion possibilities, mechanisms for solving complains, benefits of flexible plans, employee's responsibility, independence and team work had positive effect on organization commitment, while reduction of compensation had negative effect on organization commitment. (Caldwell, Chatman & O

"Reilly, 1990; Fiorito, Bozeman, Young & Meurs, 2007; Gould-Williams & Davies, 2005.)

Promotion of organization commitment implies: satisfaction, career development, training and evaluation possibility (Kuvaas, 2008). Research of relationship between management of human resources and work engagement is poor but shows features of work, such as autonomy, identification of tasks, skills of sorting tasks, importance of work and feedback, business resources (feedback, social support and management training) and organization resources such as: autonomy, training and technology have positive influence on work engagement (Salanova, Agut & Peiro 2005. godine; Saks & Rotman, 2006). Subject of this paper is to determine factors of active practice of management of human resources in state vocational sport federations and the aim of the paper is evaluating structure of components of matching

variables for overview of factors of active practice of management of human resources in state vocational federations, sport organization efficiency, attachment, satisfaction and change of intentions of employees and determining factors significant for achievement strategic goals of vocational federations.

Methodology

Sample of subjects and variables

Sample subjects of this paper were 36 state vocational sport federations, which are members of Olympic committee of B&H and 36 representatives of administrative apparatus of those federations.

Set variables for assessment of structure contain variables of active practice of management of human resources of state vocational federations. It is consisted of 7 components with 33 variables, in total. Variables for assessment of practice of management of human resources within sport organization, are modified by authors Quansah, N. (2013), Zubair, M. Tahir, Q., Muhammad, R. (2016).

7 components: Recruitment and Selection, Composition and Benefits, Training and Development, Employee's engagement, Planning a Career of an Employee, Assessment of Efficiency of Employees, Employees Protection

Methods and instruments for data collecting

Data used in this research are collected by questionnaire. The questionnaire is created out of sets variables – information about: Active practice of management of human resources of state vocational federations (survey modified by Zubair, M. Tahir, Q., Muhammad, R. (2015).

Methods of data processing

Normality of distribution of all variables is tested by Kolmogorov-Smirnov test and determination of reliability of measure scales of researched variables of alpha Cronbach test. Latent structure of sets of variables of active practice of management of human resources in state vocational federations, efficiency of sport organization, attachment, satisfaction and change of intentions of employees, are determined by Factor analysis, method of extraction of main components (PCA – Principal Component Analyses) and their rotation when applying Varimax solution. Results of Factor Analysis were used for finding the optimal conditions for determining criteria of rationalization of number of variables, which can be

used for determination of level of organization efficiency in state vocational sport federations.

Keiser-Mayer-Olkin Measure of Sampling Adequacy and Bartlett's test of sphericity are used for testing data usability for application of Factor Analysis.

Kaiser – Gutman criterion determined assessment of significance of main components where variance and typical root is equal or bigger than 1.

In order to have better overview and analysis, matrix shows only variables whose projection on main components is bigger than 600. Tables show typical roots of matrix R and marked with (Eigenvalue). Relative cumulative contributions of typical roots are marked with (% of Var). Those typical roots are in fact variances of latent dimensions, defined as main components.

Results

Latent structure of set of variables of active practice of management of human resources is shown in table 2. Variables of active practice of management of human resources is subjected to Factor Analysis with the aim to reduce and condense great number of interrelated manifest variables into small number of interrelated relative dependent latent variables, which can explain their latent structure of analyzed set of manifest variables and ensure better conditions for determining size and significance of variables, as important factors of active practice of management of human resources in sport organizations.

KMO and Bartlett's tests confirmed that margined level of benefits- factorability of correlation matrix for conduction of factor analysis, which indicates level of significance KMO = .584 and Bartlett = .000 (table 1.).

Table 1. KMO and Bartlett's Test – of analyzed area of active practice of management of human resources

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.584
Bartlett's Test of Sphericity	Approx. Chi-Square	1334.796
	df	528
	Sig.	.000

Table 2 showed typical roots and percentage (partial and cumulative) participation of isolated factors in overall variance of analyzed area of active practice of management of human resources in researched sport organizations, before and after Varimax rotation. In matrix of analyzed area of active practice of management of human resources in sport organizations, 7 main components, which explain manifest area with 87% of common variance, which means that 16,3% of variance under influence of

uniquely, were isolated. Individual contribution to explanation of common variance after Varimax rotation for the first main component was 25,02%, the second 12,33%, for third 11,48%, forth 10,74%, fifth 8,73%, sixth 8,38% and seventh was 7,04%.

Table 2. Latent structure of set of variables of active practice of management of human resources

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared			Rotation Sums of Squared		
	Total	% Variance	Cumulative	Total	% Variance	Cumulative	Total	% Variance	Cumulative
1	17.919	54.301	54.301	17.919	54.301	54.301	8.257	25.020	25.020
2	3.100	9.395	63.697	3.100	9.395	63.697	4.069	12.331	37.351
3	1.947	5.899	69.595	1.947	5.899	69.595	3.789	11.483	48.833
4	1.357	4.113	73.708	1.357	4.113	73.708	3.544	10.740	59.574
5	1.199	3.634	77.342	1.199	3.634	77.342	2.884	8.739	68.313
6	1.068	3.235	80.577	1.068	3.235	80.577	2.766	8.383	76.696
7	1.043	3.159	83.737	1.043	3.159	83.737	2.323	7.041	83.737

Cross variance Varimax rotation of extracted factors gave matrix, which shows projections of separate variables of active practice of management of human resources in sport organizations on isolated components (Table 10). In order to have better overview and analysis in matrix only variables, where projection on main components is bigger than 600, are shown.

The first main component, which explained 25,02% of overall variance of projection above given criterion (60) has the following variables:

Table 3. Structure of first main component

1. System of selection chooses the ones with desired knowledge, skills and attitudes.	r=.841
2. Selection of candidates in our organization is conducted strictly based on competence of candidates	r=.826
3. I'm informed on evaluation of personal efficiency on work	r=.767
4. Fair evaluation of efficiency	r=.758
5. Promotion and rewarding are done based on achieved results	r=.734
6. Supervisors have an open communication with employees of organization	r=.697
7. Employees credits are treated as an important and with good intentions	r=.656
8. Employees are encouraged to suggest improvements of tasks of work they perform	r=.653
9. There is a formal and written system of evaluation of efficiency	r=.623
10. Organized content of training program is relevant for needs of our work	r=.622
11. Improvement programs improved my decision making and problem solving	r=.611

Variables which represent the first main component indicate segment of structure of business technology in sport organization, which can be defined as factor- *Planning of adequate competencies, evaluation and rewarding of human resources in sport organization.* Second main component, which explained 12,33% of common variance of projection above given criterion (60) has variables:

Table 4. Structure of second factorial component

1. Regular meetings are being held in order to encourage communication between colleagues and supervisors,	r=.710
2. System of evaluation helps me to improve my career	r=.685
3. Programs of improvement improved relationship and communication among employees	r=.606

Variables, which determinate communication, improvement, evaluation of efficiency and engagement of human resources in activity of work process, are present in the second factor and the second factor is named - Factor of improvement and raising quality of work in sport organization.

Third main component, which explains 11,48% of common variance of projection above given criterion (60) has variables:

Table 5. Structure of third factorial component

1. Need for progress of an individual and organization are in correspondence	r=.723
2. Employees credits are treated as an important and with good intentions	r=.642

Looking at extracted variables we can see that there is engagement of employees. Therefore, the third main component can be defined as Factor- **Possibility of progress of engaged employees in sport organizations.**

Fourth main component, which explains 10,74% of common variance of projection above given criterion (60) has variables:

Table 6. Structure of forth factorial component

1. If the organization was in financial problems, employees would be the last ones who would feel it	r=.748
2. Rewards and encouragements are present in this organization	r=.698
3. System of rewards and punishment is clear	r=.689
4. Employees are familiar with possibilities of their progress and promotion	r=.637

Isolated projection s of variables unites improvement, protection and benefits during the work process. Therefore, fourth main component can be defined as factor- **Creating an appropriate approach in rewarding and resolving conflicts.**

Fifth main component, which explains 8,73% of common variance of projection above given criterion (60) has variables:

Table 7. Structure of fifth factorial component

1. We are adequately paid for our job	r=.754
2. Employees are asked often by their supervisors to participate in making decisions	r=.603

Table 10. Matrix of components- projection of variables on isolated components in the area of active practice of management of human resources

Rotated Component Matrix	Component						
	1	2	3	4	5	6	7
System of selection chooses the ones with desired knowledge, skills and attitudes	.841						
Selection of the candidates in our organization is conducted strictly based on competences of the candidate	.826						
I am informed about evaluation of my personal efficiency at work	.767						
Evaluation of efficiency is fair	.758						
Progress and rewarding are conducted based on achieved results	.734						
Supervisors keep an open communication with employees in organization	.697						
Employees credits are treated as important and are taken in good manners	.656		.642				
Employees are encouraged to suggest improvements in terms of tasks they perform	.653						
There is formal and written system of evaluation of efficiency	.623						
Organized content of training program is relevant to the needs of our work	.622						
Programs of improvement have improved my decision making and problem solving	.611						
There are regular staff meetings which encourage communication between colleagues and supervisors		.710					
System of evaluation helps me to improve and develop my career		.685					
Programs of improvement have improved relationship and communication between employees		.606					
Individual and organization needs for improvement are in correspondence			.723				
If the organization was in financial problems, employees would be the last ones who would feel it				.748			
Rewards and encouragements are present in this organization				.698			
System of rewards and punishments is clear				.689			
Employees are familiar with possibilities of their progress and promotion				.637			
We are adequately paid for our job					.754		
Employees are asked often by their supervisors to participate in making decisions					.603		
Existing rewards and encouragement plans do not motivate us to have better performances						.840	
System of evaluation has strong impact on efficiency of the team and the individual as well						.606	
Applicants are fully informed about qualifications necessary for job application							.867

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Based on these indicators and isolated projections of variables, respectively, we can conclude that there is interaction between supervisors and work environment as well as satisfaction of employees with their job. Therefore, we can define fifth component as factor- **Positive organizational climate and freedom of employees in their initiatives.**

Sixth component, which explains 8,38% of common variance of projection of given criterion (60) has variables:

Table 8. Structure of sixth factorial component

1.	Existing rewards and encouragement plans do not motivate us to have better performances	r=.840
2.	System of evaluation has strong impact on efficiency of the team and the individual as well	r=.606

Based on mentioned projection of variables, we can conclude that there is a reward and control of the work process of human resources. Therefore, we can define the sixth main component as a factor- **Motivation of employees.** Seventh component, which explains 7,04% of common variance of projection of given criterion (60) has variables:

Table 9. Structure of seventh factorial component

1.	Applicants are fully informed about qualifications necessary for job application	r=.867
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It is not difficult to assume that this is a feature that interprets segment of registration and selection of human resources. Therefore, the seventh main component can be defined as factor- **Informing candidates about qualifications necessary for job application.**

Identified factors are interpreted based on results, which are shown in table 10. Results show that factors, which describe key activities of active practice of management of human resources in B&H are defined in the following way:

Table 11. Identified factors from the results in table 10

F1 (DPLJR)	Planning adequate competences, evaluation and rewarding of human resources in sport organization.
F2 (DPLJR)	Improvement and raising quality of work in sport organization
F3 (DPLJR)	Possibility of promotion and progress of employees in sport organization
F4 (DPLJR)	Creating appropriate approach in rewarding and solving conflicts
F5 (DPLJR)	Positive organization climate and freedom of employees in their initiatives
F6 (DPLJR)	Motivation of employees
F7 (DPLJR)	Informing candidates about qualifications necessary for the job application

Discussion

Seven main components, which explain overall manifest area with 83,7% of common variance, were

isolated by Factor analysis, in analyzed area of active practice of management of human resources in sport organizations. Projections of factor load were over 60 and formed a criterion for selection of variables, which are the most representative for given factor. In this way seven factors, which describe key activities of active practice of management of human resources in analyzed vocational sport federations in B&H are defined in the following way from table 11.

Results of Factor analysis are expected and they match, in theory, with the complexity, coherency and dynamic of sets of integrated programs and practice due to competent and committed work force, using series of planning and practice of human resources, including employment, screening, training, rewarding and evaluating. (Doherty, 1998; Beardwell, 2007; Bloisi, 2007a Dessler, 2008.,2011.; Khasawneh, 2011; Akingbola, 2013; Armstrong, & Taylor, 2014.,2015.; Aisbett, & Hoye, 2015).

All factors present elements that are necessary for employee's efficient performance and they support the need for efficient usage of human resources and strategically adjusted to business functions in order to get better business results and give competitive advantage. These factors can also help organizations in achieving defined strategic results (Purcell, 1999; Storey, 2001) and improvement of performances of employees and business result (Huselid, 1995).

Conclusion

Development of competences of active practice and specially planning adequate competences- presents combination of abilities, results, tasks, knowledge, responsibilities, expectations and other personal features, which are used for efficient performance of different behaviour and activities for someone to perform his work in a certain area (Dubois,1988). Boyatzis (2007) defined competence as "basic feature of a person which results with efficient and/or superior success in work". Rothwell (2004) stated in his study that experts for development and training use models of competences for improvement of human performances. Cernusca and Dima (2017) explained how competence is related to performances and evolution in career. McLagan (1998) defined competences as a set of abilities and skills, which are necessary for desired level of performances. Appropriate competences are the key of top achievement. Olympic sport organizations need manager competences in order for their human resources to be more efficient and on the top level. This will help Olympic sport organizations to organize, plan, motivate, hire and improve their members whether they are employees or volunteers. Therefore, specific

competences of managing human resources, such as managing time, making decisions, communication, problem solving and managing conflicts, need to be developed (Sienkiewicz, 2014).

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