



Performance Enhancement Model for Sports Coaches Based on Motivational Job Factors with Emphasis on Herzberg's Two-Factor Motivation-Hygiene Theory

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ABSTRACT

Human efficiency is not always predictable based on economic calculations and other psychological factors such as needs, motivation, and satisfaction must be considered. Sports organizations are among those that, if the working conditions for coaches are favorable, will more fully serve the goals of sports and physical education. This descriptive-survey research, in terms of nature and method, and applied in terms of purpose, was conducted using the structural equation modeling technique. The goal was to model the performance enhancement of sports coaches based on motivational job factors, emphasizing Herzberg's Two-Factor Motivation-Hygiene Theory. The statistical population of this study consists of all sports coaches working in sports clubs of municipalities, general departments of sports and youth, and education departments across the country. The sample was selected using multi-stage cluster and simple random sampling methods. In this method, the provinces of the country are the initial sampling units, and sports clubs within the provinces are sampled in the second stage, followed by a random selection of a number of sports clubs. Given the unlimited size of the statistical population, Cochran's formula was used in the present study. Therefore, the sample size, according to the above relation, is 384 individuals. To measure the research variables, a 78-item questionnaire on "Factors Affecting Job Motivation Enhancement" by researcher based on a five-point Likert scale, from strongly disagree (1) to strongly agree (5), and a researcher-made questionnaire on coaches' performance (technical (knowledge) performance, leadership performance, emotional (intelligence) performance, communication (skills) performance, behavioral performance) were used. The collected data were analyzed using descriptive and inferential statistical methods with the help of SPSS software version 21 and LISREL version 8.8. Considering the results, the path coefficients between motivational factors (individual, contextual, managerial-leadership, organizational) and performance enhancement are positive, with t-values greater than 1.96. Therefore, with 95 percent confidence, it can be concluded that these path coefficients are significant at the 0.05 error level, indicating that individual, contextual, managerial-leadership, and organizational dimensions have a significant and positive effect on the enhancement of sports coaches' performance.

Keywords: Job Motivation, Sports Coaches' Performance, Herzberg's Two-Factor Motivation-Hygiene Theory

1. Introduction

Sports coaches, who serve at various levels and ranks, are key human resources with a decisive role in sports organizations. In today's advanced world, no athlete can achieve peaks of success without an informed and authoritative coach. According to Ruben Frost, coaches are the main axis and an important pillar of sports teams (1).

Coaching is a profession that is in the public eye. Coaches have a profound impact on organizations, institutions, and society (2). Coaches are energetic, committed, enthusiastic guides who can find suitable ways to solve sports problems (3). In this regard, amateur coaches working at the level of city public clubs, municipal sports halls, and schools can play a decisive role in attracting adolescents and young people to sports. They contribute to the development of sports full-time, part-time, honorarily, or voluntarily (4).

It should be noted that merely having a coaching profession does not mean a coach can fulfill all duties and responsibilities of their profession and have optimal performance. Rather, fulfilling this role optimally requires strong and powerful motivation on their part, and this is not possible unless coaches are satisfied with their job. The root of this satisfaction or dissatisfaction in this profession may lie in the extent to which their needs are met, and neglecting to address these needs can result in demotivated and dissatisfied coaches (McLean et al., 2019).

Motivation can be defined as a factor that energizes people, directs them, and sustains specific behaviors and in human resource management, it means an individual's interest in performing a job to the best of their ability, resulting in the progress of both the individual and the organization (5). Motivation and enthusiasm to work and achieve goals, especially in Iranian organizations, are among the most critical factors determining the level and quality of employees' job performance.

Job performance can be defined as a dimension of ability and motivation (desire) that includes a set of organizational values such as adherence to rules and discipline, proper interaction with clients, reliability, perseverance, sufficient knowledge and skills in work, and self-motivation (6). Julia's (2010) research results indicated the impact of intrinsic motivation on athletes' performance and the role of intrinsic or mental rewards, and extrinsic motivations, which play the role of hygiene factors (external factors), have a significant effect on athletes' satisfaction, contentment, and increased effort. McLean and

colleagues (2019) in their research consider motivation as a factor for better performance, success, and a driver for competition in sports events. Athletes and coaches with high job motivation showed greater job satisfaction (7). In a study conducted on 150 institutions, 55% of which had more than 1000 employees, it was found that 65% of their problems were related to absenteeism, delays, misuse of sick leave, and other attendance issues. Absence, delays, shirking work, late arrivals at the workplace, not doing the job, etc., which are signs of employees' indifference, all lead to motivational issues and dissatisfaction with the work environment. Just as people have reasons to work, they may also have reasons for not working and being indifferent (8).

Several theories have been proposed regarding job motivation. One of them is Herzberg's Two-Factor Theory (9). He believes that motivation is influenced by motivator factors (internal or mental factors of the individual) and hygiene factors (external factors). Motivator factors or mental arise from performing work and lead to individual satisfaction, serving as internal or mental rewards essential for increasing work performance, such as success, advancement, recognition, and the nature of the work, while identifying hygiene or external factors, mostly related to the job environment and context, retain employees in the organization and include policies and regulations, work environment conditions, salary and wages, personal relations with colleagues, and job security. Providing the necessary motivation for work and paying attention to employees' motivational forces is one of the most important yet complex tasks of a manager (9, 10).

In the research by Gawel and colleagues (2012), in some cases, the greater importance of mental factors over hygiene or external factors was confirmed, aligning with Herzberg's view, while in other cases, the importance of external factors was stated (10). The results of Rezaei and colleagues' (2006) research showed that the level of job satisfaction among coaches was slightly above average. The priority of their motivational needs, in order, are physiological needs, esteem needs, safety needs, social needs, and self-actualization needs. A significant negative relationship was observed between job satisfaction and physiological and safety needs. There is a significant positive relationship between job satisfaction and esteem needs. No significant relationship was observed between job satisfaction and social and self-actualization needs (11). The findings of Sofi and Shabani (2013) indicated that in terms of motivational factors, decision-making power and

in terms of hygiene factors, interpersonal relations scored the highest. Also, inferential data analysis shows that there is no significant difference in the level of job satisfaction among employees of selected sports federations and no significant difference was observed in the relationship between motivational and hygiene factors with employees' job satisfaction. Finally, job satisfaction among female employees was slightly higher than among males, although no significant difference was observed between the motivational and hygiene factors of women and men (12).

Knowing the level of satisfaction and job motivation of sports coaches is crucial due to its undeniable effects on athletes' performance and the productivity of sports organizations, making it one of the most important decision-making tools that every sports manager must adopt measures to achieve. This matter is significantly more important in educational and sports organizations due to direct dealings with individuals and the significant impact of their morale on sports and organizational performance. In other words, if it can be said that the presence of dissatisfied employees in a production organization leads to the production of defective goods and inflicts material damages on the organization and the system beyond it (i.e., society), the dissatisfaction of employees (teachers and coaches) in an educational and sports environment, due to dealing with humans (graduates and young and adolescent athletes) and producing human capital, causes much higher and irreparable damages to the current and future society; damage that perhaps can never be remedied from the minds of the graduates and athletes of educational and sports organizations and society (12). Therefore, examining the impact of factors affecting the creation of job motivation in sports coaches on enhancing the performance of sports coaches is a necessity that can assist in creating and strengthening job motivation with the goal of enhancing sports coaches' performance, opening new horizons for managers of sports organizations, and through this knowledge, enable the enhancement of organizational productivity through motivating actions and providing coaches' satisfaction. Therefore, given the importance of the subject and the lack of research studies on coaches in this area, the above study was conducted with the goal of designing a model to enhance the performance of sports coaches based on factors creating job motivation with an emphasis on Herzberg's Two-Factor Motivation-Hygiene Theory to plan appropriately for enhancing coaches' performance and self-efficacy based on the results obtained, aimed at increasing job satisfaction

and capability, as well as towards achieving the goals of sports organizations.

2. Methods and Materials

2.1. Study Design and Participants

This descriptive-survey research, in terms of nature and method, and applied in terms of purpose, was conducted using the structural equation modeling technique, aiming to model the performance enhancement of sports coaches based on motivational job factors with an emphasis on Herzberg's Two-Factor Motivation-Hygiene Theory. The statistical population consists of all sports coaches working in sports clubs of municipalities, general departments of sports and youth, and education departments across the country. The sample was selected using multi-stage cluster and simple random sampling methods. In this method, the provinces of the country are the initial sampling units, and sports clubs within the provinces are sampled in the second stage, followed by a random selection of a number of sports clubs. Given the unlimited size of the statistical population, Cochran's formula was used. Therefore, the sample size, according to the above relation, is 384 individuals.

2.2. Measures

To measure the research variables, a 78-item questionnaire on "Factors Affecting Job Motivation Enhancement" by researcher based on a five-point Likert scale, from strongly disagree (1) to strongly agree (5), and a researcher-made questionnaire on coaches' performance (technical (knowledge) performance, leadership performance, emotional (intelligence) performance, communication (skills) performance, behavioral performance) by were used.

2.3. Data Analysis

The collected data were analyzed using descriptive and inferential statistical methods with the help of SPSS software version 21 and LISREL version 8.8. Descriptive statistical methods include frequency, percentages, central tendency, and dispersion indices for describing demographic characteristics and quantitatively describing research variables, and inferential statistical methods include confirmatory factor analysis for examining model adequacy and construct validity of the test instrument, Cronbach's alpha for examining instrument reliability, Kolmogorov-Smirnov test for examining data distribution

normality, structural equation modeling for testing the main research question, etc.

3. Findings and Results

Considering the gender of the sample population, it should be noted that all respondents in this study are male. The minimum and maximum ages of the respondents are 30 and 60 years, respectively, with an average age of 47.21 years. Based on coaching certification, 9.6% of respondents have A-level certification, 30.7% have B-level certification, and 59.7% have C-level certification. Based on educational level, 60.2% of respondents have a diploma or bachelor's degree, 29.4% have a master's degree, and 40% have a doctoral degree. The minimum and maximum earnings of the coaches in this study for three coaching sessions per week are respectively 2 and 8 million Iranian Rials, with an average salary of 5 million Iranian Rials. Descriptive indices (average scores) for each of the research variables (individual, contextual, managerial-leadership, organizational) are respectively 3.08, 3.01, 3.02, 2.81 out of a possible maximum score of 5, indicating an average to slightly below average level of the variables (factors).

Before proceeding to inferential statistics and formulating research questions, the normality of the research variables was assessed using the Kolmogorov-Smirnov test. Since the significance level of the test for all variables is above 0.05, the claim of normality of the research variables is accepted, and the likelihood ratio method can be used in structural equation modeling. To measure the reliability (internal consistency of the scale) of the measurement tool, Cronbach's alpha statistic was used. For this purpose, 30 questionnaires were distributed among the statistical population, and Cronbach's alpha for the "Factors Affecting Job Motivation Enhancement" and coaches' performance questionnaires were calculated using SPSS software as 0.773 and 0.759, respectively.

To determine the face validity of the measurement tool (questionnaire on factors affecting the enhancement of job motivation for coaches and the questionnaire on coaches'

performance), the questionnaire was presented to 10 experts or subjects. After the target group completed the questionnaire, face validity was calculated using the item impact formula, resulting in an impact score of at least 1.6, based on importance \times frequency (in percent) = impact score, which was confirmed. For content validity, the questionnaires were sent to 10 experts participating in the interview, who were asked to respond based on the necessity of the questions (essential, not essential but useful, not necessary). Responses were calculated based on the CVR formula and matched with the Lawshe table, accepting values above 0.63, indicating that no question needed to be removed. After calculating CVR, CVI was assessed based on the Waltz and Basel content validity index, with the questionnaire being presented to 10 participants again. They were asked to rate each question on a four-point Likert scale regarding relevance, simplicity, and clarity (e.g., 1: not relevant, 2: somewhat relevant, 3: relevant, 4: highly relevant). CVI score was calculated by summing the agreement scores for each item that received ranks 3 and 4 divided by the total number of voters, with all accepted items for both questionnaires scoring above 0.78. Construct validity was assessed using confirmatory factor analysis. For the measurement model or confirmatory factor analysis to be confirmed, firstly, the t-values must be significant, meaning that at a 95% confidence level, they should be greater than 1.96 or less than -1.96 ($t > 1.96$ or $t < -1.96$), and secondly, the fit indices should be appropriate. Although fit indices are continually being developed and refined, there is still no universal consensus on the optimal test. The fit indices used in this research include the relative chi-square (χ^2/df), which is calculated by simply dividing the chi-square value by the degrees of freedom of the model (acceptable values for this index are between 1 to 3). The RMSEA index, where acceptable models have a value less than 0.08. Additionally, AGFI, GFI, IFI, CFI, and NFI, where acceptable values for these indices should be greater than 0.9.

Table 1

Results of the Confirmatory Factor Analysis of the Questionnaire on Factors Affecting Job Motivation Enhancement of Coaches

Construct	Component	t	Factor Loading
Individual	Psychological	23.38	0.97
	Belief-Ethical	21.38	0.91
	Professional	7.03	0.49

Contextual	Quality of Life		9.54	0.78
	Equality and Justice		6.66	0.45
	Organizational Support (Financial-Psychological)		3.15	0.41
	Organizational Culture and Climate		4.04	0.70
	Information and Communication Technology		3.51	0.47
Managerial-Leadership	Participative Management		2.53	0.41
	Transformative Leadership		2.04	0.55
Organizational	Hygienic	Wages and Salaries	3.97	0.44
		Interaction with Others	3.97	0.45
		Job Security	3.38	0.48
	Motivational	Working Conditions	3.67	0.88
		Supervision and Monitoring	2.53	0.43
		Recognition and Appreciation	2.83	0.40
		Career Progress and Development	3.67	0.42
		Job Success	4.01	0.41

Furthermore, in confirmatory factor analysis, the closer the factor loadings are to one, the stronger the relationship between the questionnaire items and the latent variables. As can be seen from Table 1, the factor loadings are greater than 0.4, and the t-values for all factor loadings are greater than 1.96. Therefore, it can be concluded that the selected questions provide suitable factor structures for measuring the variables and dimensions studied in the research model. The RMSEA value is 0.043, indicating that the model's

average squared errors are appropriate and the model is acceptable. The chi-square to degrees of freedom ratio is 1.74 (222.83/128), which is between 1 and 3, and the values of NFI, GFI, AGFI, IFI, and CFI are all greater than 0.9, indicating that the measurement model of the research variables is appropriate.

Additionally, Table 2 presents the construct validity of the sports coaches' performance questionnaire.

Table 2

Results of the Confirmatory Factor Analysis of the Sports Coaches' Performance Questionnaire

Components	Item	t	Factor Loading
Technical (Knowledge) Performance	1	11.71	0.58
	2	13.37	0.51
	3	18.54	0.54
	4	17.81	0.56
	5	17.49	0.61
	6	17.52	0.61
	7	18.48	0.67
	8	18.33	0.42
	9	22.19	0.54
	10	11.24	0.57
	11	20.63	0.52
Leadership Performance	12	18.16	0.55
	13	14.42	0.45
	14	20.17	0.59
	15	9.73	0.41
	16	11.16	0.54
	17	17.25	0.88
	18	16.46	0.46
Emotional (Intelligence) Performance	19	14.77	0.49

	20	11.86	0.64
	21	10.84	0.49
	22	17.54	0.47
	23	16.99	0.49
	24	15.99	0.47
	25	17.83	0.74
Communication (Skills) Performance	26	21.97	0.67
	27	16.74	0.68
	28	11.43	0.45
	29	10.28	0.54
	30	19.84	0.56
Behavioral Performance	31	14.33	0.53
	32	11.48	0.67
	33	12.59	0.57
	34	13.81	0.70
	35	9.55	0.66
	36	13.88	0.54
	37	24.55	0.78

As observed from Table 2, the factor loadings are greater than 0.4, and the t-values related to all factor loadings are greater than 1.96. Therefore, it can be concluded that the selected questions provide appropriate factor structures for measuring the variables and dimensions under study in the research model. The model fit indices also confirm this result, as shown in the table below. According to this table, the RMSEA value is 0.055, which is less than 0.08, indicating that the average squared errors of the model are appropriate, and the model is acceptable. Also, the chi-square to degrees of freedom ratio is 1.41 (911.92/644), which is between 1 and 3, and the values of the NFI, GFI, AGFI, IFI, and CFI indices are also greater than 0.9, indicating that the measurement model of the research variables is appropriate.

In this section, using structural equations, the main question of the article is examined: Can job motivation factors influence the performance enhancement of physical education teachers? Structural models clarify which independent variables have an impact on dependent variables. Thus, by utilizing a structural equation model,

one can simultaneously evaluate the quality of variable measurement and the acceptability of direct and indirect effects as well as the defined interactions among variables.

In this study, a 37-item questionnaire on coaches' performance is used, encompassing five components: technical (knowledge) performance, leadership performance, emotional (intelligence) performance, communication (skills) performance, and behavioral performance (charisma and personality traits).

Figure 1 and Figure 2, respectively, show the path coefficients and the t-values related to the test model. According to

Figure 1 and Figure 2, the summary of the results obtained from fitting the model is shown in the table below, which is used to test the relationships of interest. As mentioned, paths with t-values greater than 1.96 or less than -1.96 are significant.

Figure 1

Model with Standard Coefficients

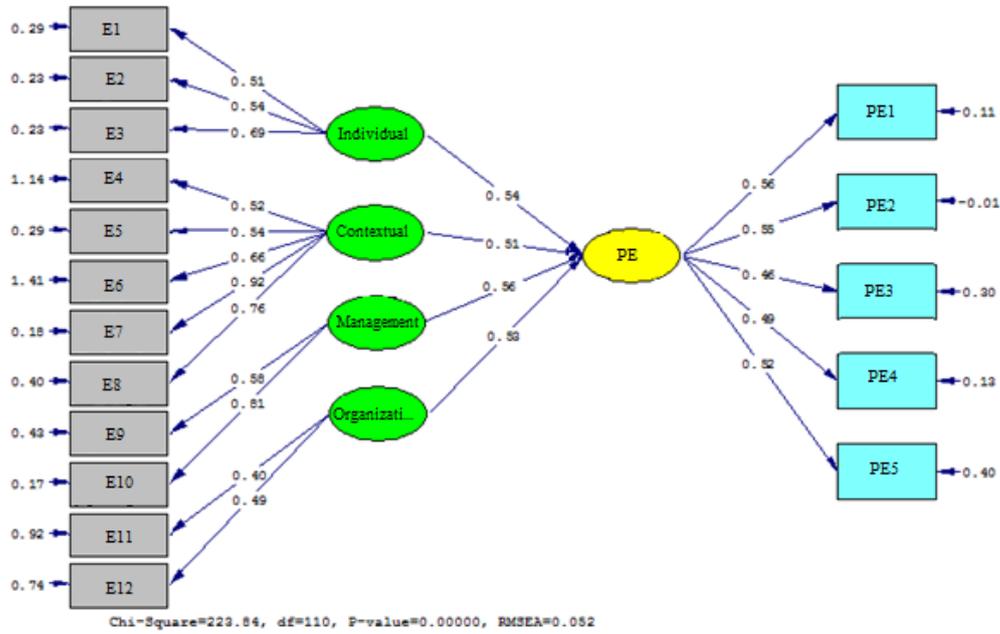


Figure 2

Model with T-Values

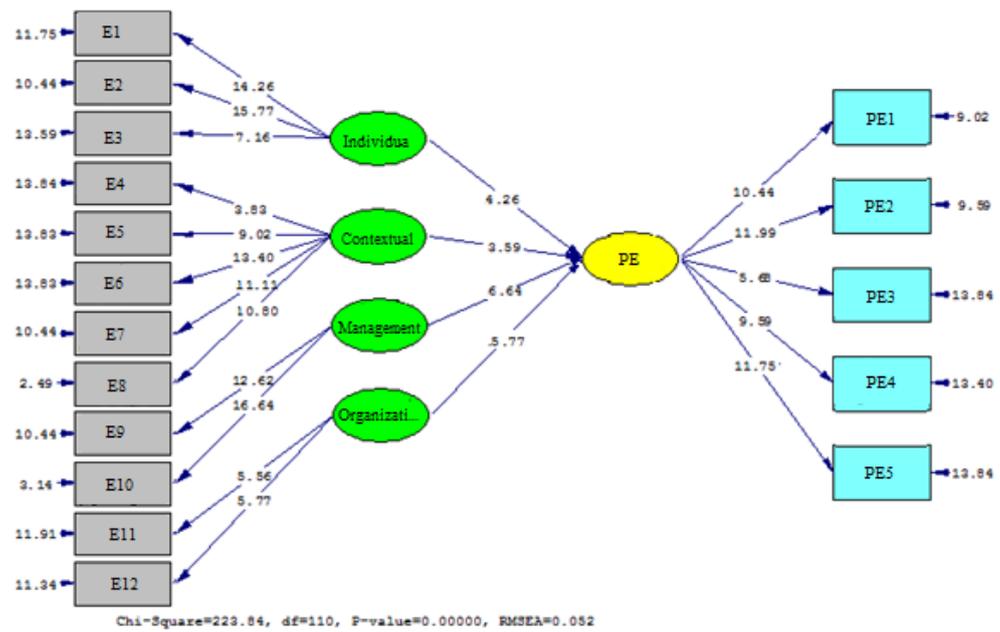


Table 3

Results of the Impact of Factors on the Performance Enhancement of Sports Coaches

Result	t	Path Coefficient	Path
Confirmed	4.26	0.52	Individual Dimension → Performance Enhancement
Confirmed	3.59	0.51	Contextual Dimension → Performance Enhancement
Confirmed	6.64	0.56	Managerial-Leadership Dimension → Performance Enhancement
Confirmed	5.77	0.53	Organizational Dimension → Performance Enhancement

Based on the results of [Table 3](#):

The path coefficient between the individual dimension and performance enhancement is 0.54, a positive value. The t-value is 4.26, which is greater than 1.96. Therefore, with 95 percent confidence, it can be concluded that this path coefficient is significant at the 0.05 error level, indicating that the individual dimension has a significant and positive effect on the enhancement of sports coaches' performance.

The path coefficient between the contextual dimension and performance enhancement is 0.51, a positive value. The t-value is 3.59, which is greater than 1.96. Therefore, with 95 percent confidence, it can be concluded that this path coefficient is significant at the 0.05 error level, indicating that the contextual dimension has a significant and positive effect on the enhancement of sports coaches' performance.

The path coefficient between the managerial-leadership dimension and performance enhancement is 0.56, a positive value. The t-value is 6.64, which is greater than 1.96. Therefore, with 95 percent confidence, it can be concluded that this path coefficient is significant at the 0.05 error level, indicating that the managerial-leadership dimension has a significant and positive effect on the enhancement of sports coaches' performance.

The path coefficient between the organizational dimension and performance enhancement is 0.53, a positive value. The t-value is 5.77, which is greater than 1.96. Therefore, with 95 percent confidence, it can be concluded that this path coefficient is significant at the 0.05 error level, indicating that the organizational dimension has a significant and positive effect on the enhancement of sports coaches' performance.

4. Discussion and Conclusion

Performance is the sum of behaviors related to the job that individuals exhibit. Performance is the result or outcome of a process and the realization of objectives. The process means that any task must be performed in stages

for it to be completed, and the realization of objectives means that the goal is achieved by following these work stages (13-15).

For enhancing performance and improving employee behaviors in a way that leads to organizational success, it is essential to identify the factors affecting performance and behavior. Apart from talent (individuals' predisposition for success in certain roles and jobs), knowledge and skills (training and development of employees' knowledge and skills), opportunity (the need for a chance to showcase talents and abilities and to use knowledge and skills effectively), resources and facilities (resources, equipment, tools, and information), job motivation (the motivation and eagerness to work and achieve goals) can be cited as crucial. The above research addresses the impact of job motivation factors (individual factors including psychological component (motivation, personality traits, attitude, positive psychology such as optimism, hope, emotional intelligence, psychological empowerment), belief component (religious insights, ethics, and social and ethical responsibility), and professional component (knowledge, emotional, and cultural competencies), contextual factors (information and communication technology, organizational support, organizational culture and climate, quality of life, equality and justice), managerial-leadership factors (participative management – transformative leadership) and organizational factors (Herzberg's Two-Factor Theory) (identified in another study by the researcher) on the performance enhancement of sports coaches.

In today's competitive environment among organizations and companies, addressing employees' needs and identifying factors affecting employee performance are crucial. Employees in organizations are mostly dissatisfied and demotivated by management performance. In this regard, one of the leadership styles that significantly help organizations in creating intellectual capital and consequently achieving a competitive advantage is participative management and transformative leadership

style (managerial-leadership factor), which enhances employees' empowerment and improves their performance (16). Regarding the impact of participative management and transformative leadership on performance, it should be said that participation and collaboration are fundamental factors in achieving organizational goals. Delegating authority and involving employees in decision-making can always affect job satisfaction and employee performance (17).

Bass and Avolio (2008) state that transformative leadership has the ability to inspire and motivate followers to achieve more than initially planned and for internal rewards; thus, transformative leadership improves their efficiency and innovative behavior and has the potential to impact human capital and consequently improve employee performance (18). Jin et al. (2016) conducted a study on "The relationship between organizational internal values, social responsibility, ethics, and organizational performance (from the individual factor components)." The results showed that the higher the acceptance of social responsibility, the more these organizations adhere to ethics, and social responsibility and adherence to ethics are clearly and distinctly related to organizational performance outcomes (19). Also, in the research by Halmzadeh et al. (2020), the results showed that indicators affecting the development of positive organizational behavior (psychological capital) significantly impact the performance enhancement of the country's elite footballers (14). Cherniss and Goleman (2001) believe that emotional intelligence (from individual factor components), like technical and cognitive skills, exists collectively for superior and excellent performances, and as individuals in an organization are promoted, they require more emotional intelligence. Therefore, employees with higher emotional intelligence can control their emotions and feelings in challenging situations and, by having superior social relationships and skills, satisfactorily meet their job needs and those of the organization (20).

Work-life quality, from organizational/hygienic-motivational factors (fair pay, safe work environment, opportunity for growth, rule of law, social dependency, overall life space, integrity, and development), can also affect the performance of amateur sports coaches. In other words, improving work-life quality can lead to improved sports coaches' performance. In fact, improving employee performance is centered on work-life quality, defined as employees' perception of how job conditions in an organization can meet their personal and job needs (21).

Inferential findings of the study also showed that organizational support (from contextual factor components) affects employee performance. Overall, perceived organizational support affects the job performance of employees of the General Directorate of Health Insurance in Tehran Province, meaning that the more employees feel supported by their organization, the more it positively affects their work maturity, motivation, performance feedback, and the credibility of their decisions.

Organizational culture, from contextual factor components (job motivation factors), affects all organizational aspects, especially employee job performance, and empowers organizations based on shared beliefs and values. Lin et al. (2013), in 18 Taiwanese factories with approximately 1451 employees exploring "The effect of climate and organizational culture on job performance," concluded that there is a significant relationship between bureaucratic, innovative, and supportive cultures with job performance, with a negative relationship with bureaucratic culture and a positive relationship with innovative and supportive cultures. Regarding "The role of organizational structure from organizational factor components in employee performance," Kessler (2007) states that "Organizational structure determines how individuals function," but how individuals function also determines the shape of the structure (22, 23).

Overall, the results of the present study are in line with Herzberg's findings, as he believes that hygiene factors are necessary for work and their absence causes problems, followed by motivational factors that encourage employees and provide opportunities for success and job satisfaction. Therefore, paying attention to employee job motivation, especially examining the factors affecting job motivation, is now accepted as a principle in most organizations, and many studies have been conducted on its importance and impact (24). On the other hand, given that creating motivation is individual, situational, permanent, endless, variable, and complex, it is not possible to establish rules and guidelines with certainty and general validity in the area of human motivation, and it is here that understanding the perceived ideal needs should be based on individual characteristics and the environment to create motivation. In this study, due to the greater role of hygiene factors, especially wages and salaries in creating job motivation, it is recommended that while paying attention to the motivational nature of work, suitable opportunities for progress and enhancement of these factors, such as job

security and good wages and benefits, be provided in the studied community and a proper and reasonable evaluation system based on performances and rewards according to individual needs be implemented.

Given the dynamic nature of motivation and the findings of organizational behavior scientists who stated that a need with greater intensity and force generally shapes the dominant behavior of employees, it is suggested that more attention be paid to material rewards, provided that each of the sports coaches properly performs the tasks expected of them, they should be encouraged through material and non-material rewards (hygienic factor). To achieve the need related to material rewards, it is recommended to pay attention to its sub-criteria, including: payment based on the level of success in competitions, payment based on the number of trained athletes, rewards proportional to the difficulty of work, payment proportional to individual performance evaluation, payment proportional to group performance evaluation, payment based on the opinion of the superior manager.

This study faces several limitations that may affect the generalizability of its findings. Firstly, the research is confined to a specific geographic region and may not reflect the conditions and perceptions of sports coaches in other areas. Secondly, the reliance on self-reported data through questionnaires might introduce bias, as participants may respond in a socially desirable manner rather than truthfully. Additionally, the cross-sectional design of the study limits the ability to infer causality between motivational factors and performance enhancement. Future research should consider longitudinal designs to better understand the dynamics of these relationships over time.

Future research should aim to address the limitations mentioned above by expanding the geographical scope of the study to include a more diverse population of sports coaches. Implementing a longitudinal study design would also be beneficial to observe changes in motivation and performance over time and establish causality. Additionally, incorporating qualitative methods such as interviews or focus groups could provide deeper insights into the motivational needs and challenges faced by sports coaches. Exploring the impact of emerging technologies and digital tools on coaching performance and motivation could also offer valuable findings in the context of modern sports management.

The findings of this study have important implications for sports organizations and policymakers. Enhancing the job motivation of sports coaches through targeted

interventions can lead to significant improvements in performance. Organizations should consider implementing participative management and transformative leadership practices to foster a supportive and empowering environment. Offering continuous professional development opportunities and recognizing the achievements of coaches can also enhance their motivation and commitment. Additionally, ensuring fair compensation and job security can address hygiene factors that affect motivation. Policymakers should advocate for policies that support the well-being and professional growth of sports coaches to sustain and enhance the quality of sports training and performance at all levels.

Authors' Contributions

Ali Akbar Ghadernejad was instrumental in the design of the research methodology, data collection process, and initial drafting of the manuscript. His academic background and insight into motivational theories greatly contributed to the depth and focus of the study.

Hassan Fahim Devin significantly contributed to the formulation of the research hypothesis and the overall supervision of the project. As an associate professor with a rich background in sports science, his expertise was crucial in refining the study design, overseeing the analysis of the collected data, and critically revising the manuscript for important intellectual content.

Amir Moghaddam, another key contributor from the same department, focused on the statistical analysis part of the study. His proficiency in structural equation modeling and the use of SPSS and LISREL software was fundamental in interpreting the data, validating the research findings, and ensuring the statistical robustness of the study. Additionally, Amir contributed to the drafting and revising of the manuscript, ensuring the accuracy of the results presented.

Mohamadreza Esmaeilzadeh Ghandehari was involved in the extensive literature review process, which helped in grounding the study within the existing body of knowledge on motivational theories in sports. His contribution was also vital in the development of the research instruments, particularly the questionnaires used to measure the job motivation factors and coaches' performance. Furthermore, he assisted in drafting and revising the manuscript, ensuring that the discussion and conclusions were well-supported and articulated.

All authors have read and approved the final version of the manuscript. They agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethics Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

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