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Investigating the Effective Factors on the Productivity and Empowerment of Human Resources of the General Directorate of Sports and Youth of Qazvin Province

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ABSTRACT

Attention to human resources in organizations has taken a significant portion of the time and capital of leading organizations in recent years. Smart managers now understand that no matter how much they invest in developing and promoting human resources and productivity, they ensure their organization's success, efficiency, and competitive advantage. It has been claimed that the most effective way to gain a competitive advantage in organizational settings is to enhance the efficiency and empowerment of human resources, especially considering the tremendous changes and developments. Therefore, productivity has been discussed and investigated to empower the organization's human resources. This research examines the factors affecting the productivity and empowerment of human resources in the General Directorate of Sports and Youth of Qazvin Province. This study is of a survey and applied type, utilizing a questionnaire as the data collection tool, with field data collection methods taken into account. The statistical population of this research comprises all managers, deputies, experts, employees, and heads of the Qazvin Province Sports and Youth Directorate sports teams, with Cochran's formula applied for sampling. This study used structural equation modeling to analyze the data, employing LISREL software. Initially, the indicators were identified, and hypotheses were developed based on these indicators. Finally, using statistical techniques, all proposed hypotheses were validated, leading the researcher to conclude that the proposed factors significantly impact the productivity and empowerment of human resources in the General Directorate of Sports and Youth of Qazvin Province.

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1. Introduction

In general, empowering employees involves creating a work environment where individuals can make decisions in certain situations related to their work. These decisions can vary in size and significance, with the responsibility for their impact resting with the employer. The rationale behind empowering employees is to increase their responsibilities, boost morale, and improve the quality of their work life, which can fundamentally and significantly affect employee productivity. Productivity is the result of empowering human resources within [1,2].

2. Literature Review

Hosseini et al. (2019) mention that factors such as trust in employees, training of human resources, and employees' sense of effectiveness contribute to the development and empowerment of human resources.

Widodo et al. (2019) demonstrated that employees' leadership, motivation, satisfaction, and creativity are among the adequate dimensions of human capital. Additionally, they explored the role of managers' human and social capital on small businesses' international technological innovation. They found that managers with human capital, such as experience, knowledge, and higher social capital, tend to pay more attention to and invest more in technological innovation.

Monroe (2018): In his research, Monroe argues that a link between sports and social services should be established to develop human capabilities in sports (emphasizing football as a social process). He emphases the importance of collaborative decision-making, collective learning, experiential learning, and opportunities for continued university education and improvement of knowledge in executive processes to realize the development of human capabilities in sports.

Herbazman and Alice (2018) investigated the relationship between emotional intelligence variables and those related to improving human resource productivity and the quality of work life concerning the development of human resources. The results indicated that the quality of work life and empathy variables have the most and least significant regression effects on the human resources development variable.

According to the practical strategy proposed by Rajan and Zingales (1998), the main finding of these authors indicates that banking efficiency improved credit constraints and increased the growth rate of financing-related industries during the crisis. This finding highlights the significant and often overlooked importance of bank productivity in alleviating the negative effects of the financial crisis on the growth of industries that are more dependent on foreign financing [6,7,8].

3. Data Analysis Method

In this research, the data analysis method was based on defining hypotheses appropriate to the research topic and designing a suitable questionnaire, which the researcher developed based on several years of direct experience. The structural equation technique was employed for data analysis, utilizing LISREL and SPSS software. The confirmatory factor analysis technique was applied in the first stage of this research. Path analysis and structural equation modeling are among the analysis methods used in management research. A complete structural equation model combines path diagrams and confirmatory factor analysis. The reasons for choosing this method for modeling structural equations include the following:

A) It provides a comprehensive statistical approach for testing hypotheses about the relationships between observed and latent variables, sometimes referred to as structural analysis of covariance or causal modeling [3,4,5].

B) A latent variable is not measured directly but is inferred from two or more observed variables acting as indicators.

C) Structural equation models typically consist of a combination of measurement models and structural models.

D) In this research, all dimensions of the subset of structural equations are utilized.

4. The Statistical Population of This Research

The statistical population of this research comprises all managers, deputies, employees, experts, and heads of sports teams in the General Directorate of Sports and Youth of Qazvin Province. The following discussions will emphasize the types of methods and calculation formulas related to this population [9,10,11].

5. Research Hypotheses

• Changes in the management system have impacted the productivity and empowerment of human resources in the General Directorate of Sports and Youth of Qazvin Province.

• Technical factors have influenced the productivity and empowerment of human resources in the General Directorate of Sports and Youth of Qazvin Province.

• Economic factors have affected the productivity and empowerment of human resources in the General Directorate of Sports and Youth of Qazvin Province.

• Amendments to laws and regulations have impacted the productivity and empowerment of human resources in the General Directorate of Sports and Youth of Qazvin Province [12,13,14].

6. Research Method

Considering the goals and questions of the research, along with the limitations of previous methods and the need for innovation, this study employed grounded theory to extract a model based on the relevant categories related to the General Directorate of Sports and Youth of Qazvin Province. The grounded theory method is a qualitative research approach used to identify the underlying categories of the phenomenon under study. This method was introduced by sociologists Barney Glaser and Anselm Strauss in 1967. The primary data collection method in this approach involves various types of interviews. A paradigmatic model (influenced by the Frankfurt School) is presented by analyzing and coding the interview texts. In the grounded theory method, a theory is developed based on a set of data, explaining a process, action, or interaction on a broader level. Most researchers utilize the Strauss and Corbin method to conduct grounded theory analysis.

7. Findings

7-1. Data Analysis in the Qualitative Section

The method of data analysis in the qualitative section is based on theoretical coding, which is derived from thematic analysis. Theoretical coding involves analyzing, conceptualizing, and reassembling data differently. It is the main process through which theory is developed from the data. The current research follows a qualitative approach using the grounded theory method.

Qualitative Research: This complex process requires a relatively long duration for data analysis, done through inductive reasoning. As a qualitative research approach, the grounded theory method forms a theory based on a data set.

Grounded Theory Method: This method is typically implemented in three ways: systematic, emergent, and structural. This research used the systematic method attributed to Strauss and Corbin for data analysis.

- The systematic method involves three main stages: open coding, axial coding, and selective coding.

- Data analysis in grounded theory occurs through three stages of coding:

1. Open Coding: The first step, where conceptual categories are identified in the data at a basic level of abstraction.

2. Axial Coding: The second step involves identifying relationships between the conceptual categories.

3. Selective Coding: The third step, where these relationships are conceptualized and reported at a higher level of abstraction.

According to the above explanation, the three types of coding are central to grounded theory analysis. Although these coding stages are conceptually distinct, they often overlap and may be carried out simultaneously. However, each stage involves a different operation, as outlined below. The three types of coding used to analyze the data are:

1. Open Coding
2. Axial Coding
3. Selective Coding

7-2. Reliability of Axial Coding Results

The Kappa index was used to measure the reliability of the designed model. To do this, another expert in the field, without prior knowledge of how the researcher integrated the codes and concepts, attempted to categorize the codes into concepts independently. The concepts created by the researcher were then compared with the concepts provided by this expert. Finally, based on the number of similar and differing concepts, the Kappa index was calculated to assess the reliability:

Table 1: Kappa coefficient

Criterion		Value	Standard Error	Tb	Sig
Agreement criterion	kappa	0.955	0.125	6.756	0.000
Number of codes		4			

7-3. Inferential Data Analysis

Following the descriptive analysis of the data, inferential analysis was conducted. The research hypotheses are evaluated and tested in inferential analysis to determine their validity.

7-3-1. Data Normality Test

Before applying the statistical tests for this research, it is necessary to perform a data normality test first. This is because, for any test that assumes normality, the normal distribution of the data must be confirmed in advance.

When testing for normality, the null hypothesis assumes that the data distribution is normal, and this hypothesis is tested at a 5% error level. If the resulting test statistic exceeds 1.96, there is no reason to reject the null hypothesis, indicating that the data is usually distributed. This research

used the Kolmogorov-Smirnov test to assess data normality at the 5% significance level. The statistical assumptions for this test are as follows:

Since the research is based on a structural model that assumes data normality, the normality test was conducted first. In confirmatory factor analysis and structural equation modelling, all data don't need to follow a normal distribution, but the factors (or structures) must be normally distributed.

There is no need for all data to be normal, but the factors (structures) must be normal.

Table 2: Data normality test

Research variables	Number	Level of significance	Test statistics	Status
Changes in the management system	384	0.081	0.056	normal
Technical factors	384	0.062	0.045	normal
Economic factors	384	0.082	0.036	normal
Amendment of rules and regulations	384	0.014	0.021	normal

According to the results shown in Table 2, the significance level (sig) for all variables is greater than 0.05. Therefore, it can be stated with 95% confidence that the data is normally distributed. As a result, the parametric method can be used for analysis, and there is no reason to reject the null hypothesis, which confirms that the distribution of measurement data for each dimension is normal.

7-4. Partial Least Squares Technique and Research Hypothesis Testing

The theoretical foundations of the Partial Least Squares (PLS) method will be explained in detail here. The Structural Equation Modeling (SEM) method with the partial least squares approach (PLS-SEM) was introduced by Wold (1997), followed by an advanced version of this method presented by Lemüller (1998). PLS-SEM is a second-generation structural equation modelling approach, offering several advantages over first-generation methods that were based on covariance.

In this research, the second-generation method of structural equation modelling, specifically the component-based method later renamed Partial Least Squares (PLS), was utilized. This method, pioneered by Wold in 1997, is especially effective in analyzing complex models with small sample sizes.

The PLS method consists of two main steps:

1) Evaluating the Fit of Measurement and Structural Models: This step involves assessing the reliability and validity of the measurement models and ensuring the overall structural model fits the data.

2) Testing Relationships Between Constructs: This step examines the relationships between latent variables (constructs) to test the hypotheses and determine the strength and significance of these relationships.

7-5. Confirmatory Factor Analysis of Research Variables

Before proceeding to the hypothesis testing and conceptual modeling stages, it is essential to ensure the accuracy of the measurement models for both the independent and dependent variables. Therefore, the measurement models for these two variables are presented based on first-order confirmatory factor analysis (CFA).

Confirmatory factor analysis is one of the most established statistical methods to explore the relationships between latent variables (underlying factors) and observed variables (survey questions). This process defines the measurement model of the study. Figures 1 and 2 illustrate the confirmatory factor analysis of the research variables.

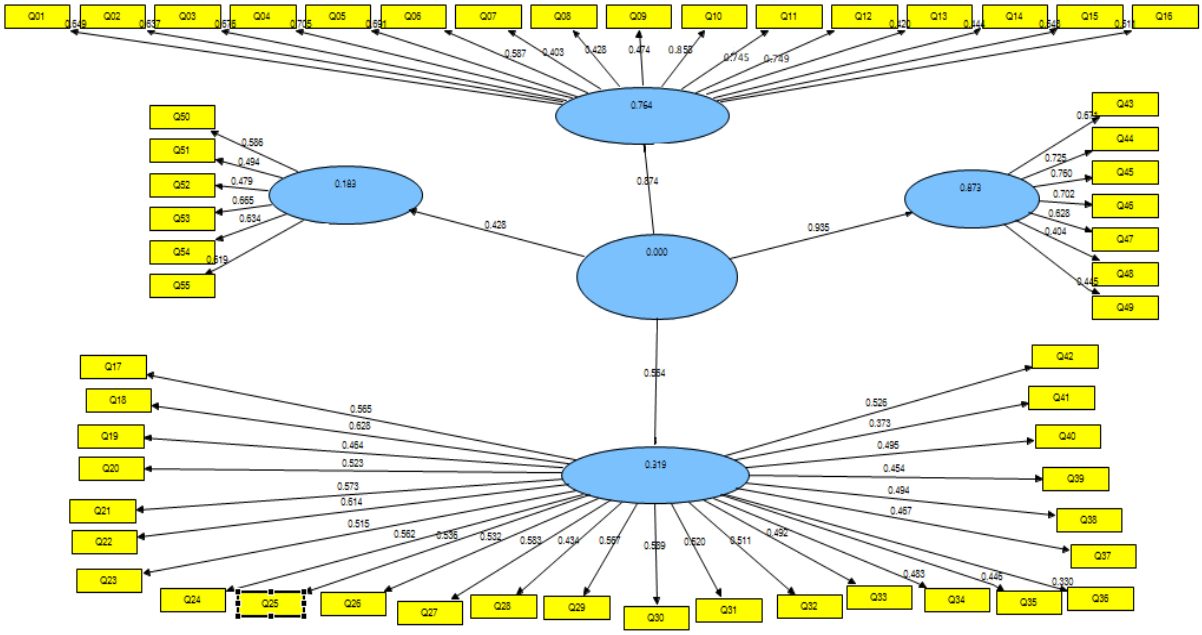

Figure 1: Factor load coefficient of designing and developing a model for the factors affecting the productivity and empowerment of human resources of the General Directorate of Sports and Youth of Qazvin province

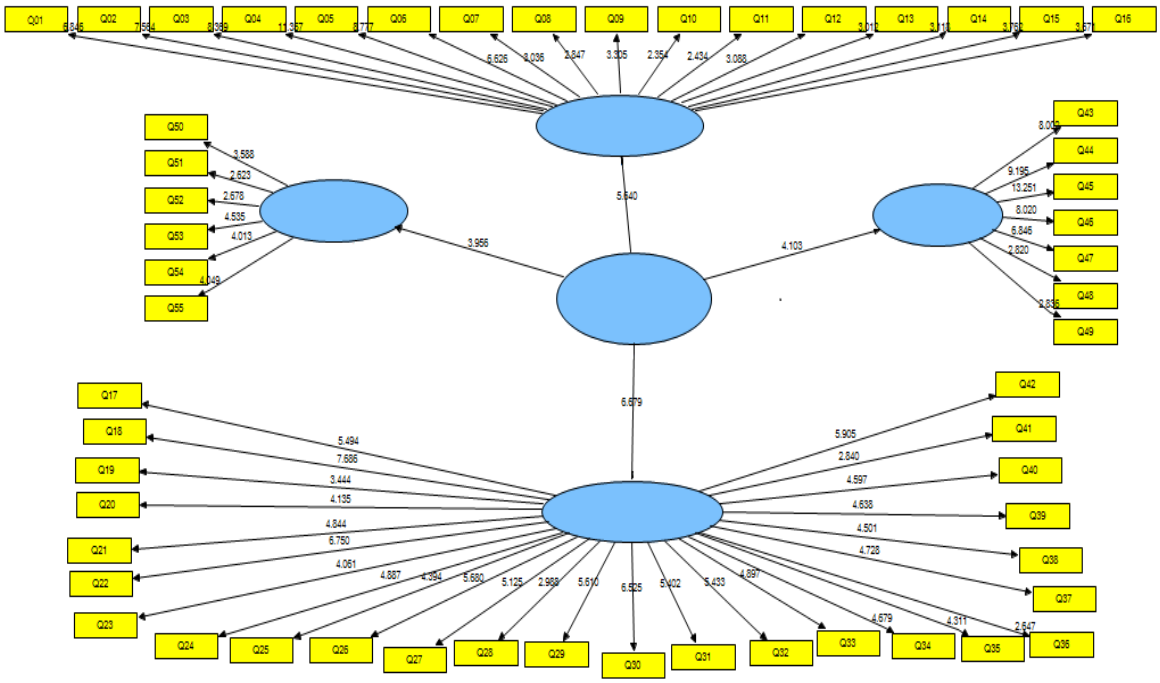

Figure 2: The significance coefficient of designing and developing a model for factors affecting the productivity and empowerment of human resources of the General Directorate of Sports and Youth of Qazvin Province

The factor loadings in this model, shown in both non-standard and standard estimation modes, represent the impact of each variable or item in explaining the variance of the main factor or variable. In simpler terms, the factor loading reflects the degree of correlation between each observed variable (such as a questionnaire item) and the latent factor.

The corresponding item is significant if the test statistic for the variable significance is greater than 1.96. If the value is lower than 1.96, the item is removed from the model, as it does not contribute sufficiently to explain the latent variable.

8. Conclusion

Employees with high productivity contribute significantly to an organization's improvement, first by enhancing their skills and capabilities and, ultimately, by helping the organization achieve its set goals. Productivity fosters a culture of excellence, boosting organizational morale and improving the quality of the work environment. Historically, increasing productivity was a major challenge in traditional management; however, with the evolution of modern management practices, focusing on control and optimization, productivity has entered a more advanced phase.

Furthermore, when an organization demonstrates successful and productive performance, employees and middle managers benefit from various incentives, such as salary increases, bonuses, and improved benefits like health insurance. These rewards motivate the workforce, enhancing job satisfaction and overall career progression.

For any organization, attaining high productivity levels is a crucial goal that top managers must fully grasp to meet predefined objectives. In this research, key indicators were first identified, hypotheses were developed based on them, and statistical techniques were used to test them. Ultimately, all hypotheses were confirmed, and the following conclusions were drawn:

First Hypothesis: Changes in the Management System Have Had an Impact on the Productivity and Empowerment of Human Resources of the General Directorate of Sports and Youth of Qazvin Province

According to the results, changes in the management system have a significant relationship with the productivity and empowerment of human resources in the General Directorate of Sports and Youth of Qazvin Province, with a test statistic value of 5.640. Additionally, the results indicate that the intensity of the relationship between the factors is 0.874, confirming that this impact is positive. This suggests that as the changes in the management system improve, so does the productivity and empowerment of the human resources in the General Directorate. Therefore, it can be concluded that changes in the management system have substantially affected the productivity and empowerment of human resources in the General Directorate of Sports and Youth of Qazvin Province.

Second Hypothesis: Technical Factors Have Impacted the Productivity and Empowerment of Human Resources of the General Directorate of Sports and Youth of Qazvin Province.

Based on the results, technical factors demonstrate a significant relationship with the productivity and empowerment of human resources in the General Directorate of Sports and Youth of Qazvin Province, with a test statistic value of 3.956. The intensity of this relationship is 0.428, which is also confirmed to be positive. This indicates that technical improvement contributes to increased productivity and empowerment of human resources in the organization. Therefore, it can be concluded that technical factors have positively influenced the productivity and empowerment of human resources in the General Directorate of Sports and Youth of Qazvin Province.

Third Hypothesis: Economic Factors Have Influenced the Productivity and Empowerment of Human Resources of the General Directorate of Sports and Youth of Qazvin Province

According to the results, economic factors show a significant relationship with the productivity and empowerment of human resources in the General Directorate of Sports and Youth of Qazvin Province, with a test statistic value of 6.679. Additionally, the intensity of the relationship between the factors is 0.564, confirmed as positive. This suggests that better economic factors improve the productivity and empowerment of human resources in the General Directorate. Therefore, it can be concluded that financial factors have significantly and positively impacted the productivity and empowerment of human resources in the General Directorate of Sports and Youth of Qazvin Province.

Fourth Hypothesis: The Amendment of Laws and Regulations Has Had an Impact on the Productivity and Empowerment of Human Resources of the General Directorate of Sports and Youth of Qazvin Province

The results indicate that the amendment of laws and regulations has a significant relationship with the productivity and empowerment of human resources in the General Directorate of Sports and Youth of Qazvin Province, with a test statistic value of 4.103. The intensity of the relationship between the factors is 0.935, which is confirmed to be positive. This shows that improvements in laws and regulations positively affect the productivity and empowerment of human resources. Therefore, it can be concluded that the amendment of rules and regulations has substantially and positively impacted the productivity and empowerment of human resources in the General Directorate of Sports and Youth of Qazvin Province.

9. Research Proposals

Enhancing Human Resource Productivity: The productivity of human resources through optimization, continuous training, efficiency, and task specialization plays a crucial role in ensuring organizational success. People are the core of any organization, so companies must invest time and resources to improve their productivity and expertise. By doing so, organizations can significantly enhance the efficiency and effectiveness of their service delivery.

Building an Informed and Motivated Team: For an organization to function productively, it needs an informed, motivated, and purpose-driven team backed by strong management expertise. As the organization's leader, ensuring that employees are involved in all stages of the organizational process, including mutual recognition, commitment, capability development, and honest efforts is crucial. Managers can create an environment that fosters optimal results and continuous improvement by encouraging participation and performance in assigned tasks.

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