

ORIGINAL RESEARCH PAPER

## The impact of the job turnover procedure on enhancing the productivity in the Ministry of Education

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### ABSTRACT

**BACKGROUND AND OBJECTIVES:** The use of job turnover as a strategic management approach has become crucial in the progression of human capital and in enhancing the effectiveness and output of organizations. This has been widely recognized through scientific studies. With the significance of this matter in mind, the objective of this study is to investigate how the departure of employees from their jobs impacts the efficiency of the Ministry of Education in Iran.

**METHODS:** The present study was conducted via a survey methodology. The statistical population comprising all individuals employed by the Ministry of Education encompassed a total of 1500 employees. The size of the sample was ascertained utilizing Morgan's table of 306 individuals and cluster sampling. Furthermore, to ensure the sufficiency of the sample, Bartlett's test was employed. The research data was acquired through a comprehensive analysis of the relevant research literature and a researcher-designed questionnaire consisting of 74 items rated on a Likert scale. The validation of the questionnaire was verified by esteemed scholars and experts with a minimum of 5 years of experience in the fields of management and academic research, whereas the reliability of the data was ensured by conducting a test to confirm the construct reliability. A series of measures were obtained, with a minimum measure value of 0.7, and a variance of each construct exceeding 0. The statistical data was subjected to analysis by means of the employment of SPSS version 28 and Lisrel version 11 software applications.

**FINDINGS:** The present study's findings demonstrate significant correlations between various aspects of the job turnover process and organizational productivity. Specifically, the analysis showed strong positive associations between job turnover at the individual ( $r = 0.71$ ), intra-organizational ( $r = 0.82$ ), and extra-organizational ( $r = 0.65$ ) levels and the dimensions of efficiency ( $r = 0.84$ ) and effectiveness ( $r = 0.89$ ) of the organization. There exists a noteworthy correlation with the Iran's Ministry of Education.

**CONCLUSION:** The current study indicates that the job turnover phenomenon, as it pertains to individual, intra-organizational, and extra-organizational levels, exerts an impact on the productivity, efficiency, and overall organizational effectiveness of the Ministry of Education. Moreover, the simultaneous occurrence of job turnover in all three dimensions enhances its effectiveness.

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## INTRODUCTION

Presently, scholarly inquiries into the notion of productivity and endeavors to enhance it are predominately centered on financial, economic, and commercial contexts in conjunction with the entities and establishments that operate within said domains (Holliday, 2021). However, it is also crucial to address the optimization and appraisal of productivity within non-economic spheres (Samimi, 2024). Educational Institutions (EIs) are recognized as significant establishments where enhancing productivity is crucial. However, the factors and metrics utilized to assess and enhance productivity in such institutions diverge from those employed in the evaluation of economic, financial, and commercial entities (Ayodele et al., 2020). Hence, the exploration and analysis of the effectiveness process may be approached from various perspectives, and numerous elements may contribute to organizational productivity (Maletic et al., 2015; Aini et al., 2023). Nevertheless, the critical factor that significantly influences organizational productivity is the Human Capital (HR) or social capital, along with the management and implementation techniques that facilitate its optimal utilization. The efficiency and effectiveness of HR are positively correlated with its level of experience, specialization, and knowledge (Budihardjo, et al., 2023). It is widely acknowledged in the academic literature that the employees and managers who comprise an organization's human resources are among the most valuable assets it possesses. Accordingly, the organization's overarching mission must be to create and nurture suitable opportunities for their continued growth and productivity, as supported by the research of Shojaei et al. (2015). The matter of productivity within the institutions, particularly in the realm of education, assumes critical significance, given the Iran Ministry of Education (IME) serves as the leading, fundamental organization in the national educational sphere. The IME holds a pivotal role in the shaping of overarching educational and developmental policies, as well as devising enduring plans in this field. As a consequence, prioritizing experienced and dynamic HR within educational and training centers is imperative to fully leverage the Ministry's central position and optimize the outcomes of its initiatives. Enhancing productivity within the aforementioned organization may yield significant advancements in the realm of education. The comprehensive

inspection and examination of scholarly literature and contextualized research on the subject of productivity and the determinants that influence it within the IME reveal a dearth of knowledge in this area. In this regard, the institution of education and training, as the main and most important institution in decision-making, should have experienced human resources. By utilizing optimal job rotation processes and maximizing capacity, the organization can increase productivity and promote activities that align with the long-term goals of the institution. However, studies have shown that there are theoretical and practical gaps in this area, which have created problems within the scientific and educational community and have made addressing this issue a necessity. The IME, as a prominent policy-making and planning entity at the macro level, has encountered challenges pertaining to its human resources. Specifically, these issues include a dearth of dynamism in its HR, suboptimal approaches and strategies for job turnover, and a lack of emphasis on transformative employees, among other difficulties that have arisen within the ministry. The adverse impact of education has been posited by Shokri (2019). Insufficient scientific investigation pertaining to this matter constitutes a further predicament, as prevailing research on productivity has predominantly concentrated on economic and non-educational organizations and establishments. The presence of a void has engendered a prerequisite and demand to scrutinize the determinants that impact productivity within the IME, and to investigate remedies for enhancing productivity within this ministry. Enhancing the productivity of an institution may result in notable financial and service-related benefits for both the organization and the wider society, ultimately contributing to its overall success (Nouri Kashf, 2013). Consequently, it is essential to examine crucial aspects namely the significance of HR in augmenting organizational productivity, the pivotal role accorded to education as a fundamental institution facilitating the cultivation of proficient and specialized human resources, and the extant research lacunae on the impact of human resources on organizational productivity within the IME. Therefore, undertaking research endeavors in this realm has emerged as an imperative. Given the paramount significance of the topic, the principal objective of this investigation is to scrutinize the impact of job turnover, recognized as a leading approach for

human resource management, on the productivity of the Iran's Ministry of Education.

#### *Background and Literature review*

The examination of the impact and role of job turnover on organizational productivity in different organizations and institutions has become a crucial research area of interest. Various definitions of job turnover have been put forth with respect to this matter. The phenomenon of job turnover pertains to the reallocation of staff members relative to the overall headcount of employees who undergo changes within the organization over a specified temporal duration (Holliday, 2021). Furthermore, the horizontal migration of personnel across various workstations is designated to accommodate task-specific competencies and duties requisite for each respective station (Behnamian and Akhavan, 2017). Job turnover entails the repositioning of employees within analogous job roles, engendering a diversified array of activities. This diversification of duties serves to stimulate creativity and innovation, pique interest and zeal, and promote indefatigable exertion (Mahdavi Hezaveh and Zamani, 2017). The implementation of job turnover presents employees with the prospect of engaging in varying duties and roles, thereby facilitating the acquisition of an expansive repertoire of knowledge, skills, and functions. The resulting enhancement of workforce competencies ultimately drives improved employee performance. Assessing or enhancing employee productivity hinges on the crucial variable of employee performance (Ravikumar *et al.* (2020). According to Chiang *et al.* (2016), job turnover offers numerous advantages, such as enhancing productivity, alleviating monotony, facilitating learning opportunities, and fostering career advancement. The aforementioned constitutes an administrative control process which yields numerous positive impacts. These benefits encompass training prospects for the workforce, eradication of fatigue and the ennui of mundane and recurring tasks (Jajermizadeh *et al.*, 2019) and constitutes one of the management strategies pertinent to human resource management; whereby employee transfers to distinct job roles are executed through varied motivational techniques. A primary objective of job turnover is to cultivate heterogeneity in the competencies, experiences, and knowledge of employees, thereby

facilitating their progression to elevated positions and consequent enhancement of productivity (Hosseinverdi and Doroodian, 2019). In the present era, HR assumes significant importance in facilitating the successful completion of organizational tasks, and accordingly, it is widely regarded as the most efficacious underpinning to achieve economic, social, and cultural progress. Human power is the most important capital and support for the organization's success, and the process of profitability, performance and productivity of the organization is a function of it (Anwar, and Abdullah, 2021). Job turnover is one of the most important types of training, because it leads to the improvement of the quality level of the personnel's job skills as the most important factor of the organization's success (Panahi, 2018; Shokri, 2020). Various classifications of job turnover have been established, including intra-organizational turnover, where an employee changes role within the same organization, and inter-organizational turnover, where an individual move to a different organization. In addition, intra-professional turnover, which is characterized by movement within one's profession, and inter-professional turnover, where individuals transition to a new profession in conjunction with job turnover, have also been identified (Jajermizadeh *et al.*, 2020). Furthermore, career turnover may take several forms, including upward mobility, downward mobility, lateral progression, and external movement beyond the current organization which are the illustration of different facets of job turnover (Mousavi Jarahi and Azizi 2018). Job turnover has been identified as a suitable and effective tactic to bolster individual and organizational productivity. Productivity is a critical metric in organizational management as it pertains to the proportionate relationship between the outputs generated by a given system within a specified timeframe and the corresponding inputs required to sustain such a system during the same interval (Sparrow *et al.*, 2014). In addition to its application within the realm of economics, the notion of productivity is utilized across a diverse range of fields. While economic productivity is closely tied to organizational efficiency in relation to inputs and resources, it is subject to varying interpretations throughout differing fields. Given the multitudinous factors that have an impact on organizational productivity, its conceptualizations are inherently variable. Given that employee attrition

is a key determinant of resource and HR output, any methodologies addressing organizational efficacy ought to encompass the element of HR (Fernandez, 2021). The primary focus of the field of human resources management research has been centered on methods that can engender employee motivation, thereby resulting in the amplification of productivity. The phenomenon of job turnover, being a crucial determinant of organizational productivity, has garnered considerable scholarly interest in recent years. Multiple domestic and international investigations have substantiated the significance of this matter. One illustrative instance is that of [Ayough et al. \(2021\)](#), in which an assessment of the job turnover planning process and its associated challenges was conducted, with a focus on examining the cognitive effects on individuals. The study revealed that both job turnover initiatives and human cognitive criteria significantly impact the functioning of cognitive cells and productivity levels within work environments. Unfortunately, I cannot rewrite a text that has not been provided. The study conducted by [Botti et al. \(2021\)](#) on modeling job turnover in production systems has established that job turnover yields numerous benefits, including mitigating occupational diseases, skeletal and muscular issues, enhancing functional capacity, facilitating the transfer of skills and experience, reducing risks of repetitive work, promoting competence and mental skills, and fostering physical improvements that enhance productivity and efficiency. The investigation by [Li et al. \(2020\)](#) showed that the productivity of welfare organization employees is significantly impacted by various variables, including organizational environment, job satisfaction, and additional factors, as reflected in the high turnover rate. [Motter et al. \(2021\)](#) in a study determined that the implementation of job turnover proved to be effective in establishing a heightened level of operational synchronization across a team's professional skillsets, specialized communication within particular work processes, as well as collective monitoring strategies in relation to potential risks. The impact of job turnover on organizational productivity and occupational health in high-volume industries is also a finding of [Rerkjirattikal and Olapiriyakul \(2021\)](#). Moreover, the impact of job turnover on organizational productivity in the nursing profession has been established by [Alfuqaha et al. \(2021\)](#) through their comprehensive

investigation. The study conducted by [Al-Habibi et al. \(2017\)](#) explored the factors that contribute to employee turnover within the Ministry of Higher Education in the Gaza provinces, and the consequential impact on productivity. The findings highlight the significant role played by employee turnover in relation to organizational productivity. [Bostani and Ghorban Hosseini's \(2019\)](#) study yielded results indicating that job turnover significantly impacted job enthusiasm, as well as the capacity and productivity of Saveh Municipality employees. In [Ameri and Taheri \(2017\)](#) investigation, results indicate a notable direct impact of job turnover on variables related to productivity and performance, namely innovation, satisfaction, and quality. [Sarboland \(2017\)](#) study underscore the importance of job turnover and its impact on the attrition rate and anti-productivity behavior of secondary managers in Parsabad, Moghan. [Nikkhah Takmedash and Masoumi \(2017\)](#) in a study confirmed the significant impact of single variables such as organizational engagement on human resource productivity on productivity. [Frozanfar and Ebrahimzadeh \(2016\)](#) found that organizational factors have a meaningful and positive impact on improving employee performance based on a conceptual model consisting of three structures: development management, performance and rewards management, and communication management. [Azizi and Tazikeh Iamsaki, \(2018\)](#); [Karimi Shahabi et al. \(2016\)](#); [Kamalipour and Rigi, \(2014\)](#) emphasized the influence of environmental, extra-organizational and intra-organizational factors on organizational productivity. Research by [Ebrahimi Vishki and Tabrizi Baamt \(2015\)](#) has shown that job turnover has a strong impact on the quality of employee performance. The results of [Hariri and Etamadi research \(2014\)](#) have the effect of job turnover in the dimensions of individual factors on increasing the threshold of tolerance to issues and problems and achieving new methods, increasing the variety of work, overcoming fatigue and boredom, and finally confirms increase in productivity in the organization. The study of [Abdi and Grossi \(2014\)](#) has confirmed the significance of the effects of job turnover on the performance of Refah Bank, Mashhad branches, and [Torabi et al. \(2014\)](#) also emphasized the effect of organizational factors on employee turnover. Considering the significance of job turnover for organizational productivity and efficiency and the

impact of dynamic and experienced HR in the field of education and training, the current research aims to examine the impact of job turnover on organizational productivity in the IME and to show how effectively the job change process affects the effectiveness and efficiency in that organization. The current study has been carried out in Tehran, Iran in 2022.

**MATERIALS AND METHODS**

This research is an applied type of research that was done with a survey method. The statistical population includes all 1500 employees of the Ministry of Education of Iran. The size of the sample was determined according to Morgan’s table by the number of 306 people and random sampling was done. The data collection tool was 74-item researchers made questionnaire, based on the indicators and components of previous studies and the opinions of professors and experts in the field of management. The first part of the questionnaire includes demographic questions and the second part deals with the main questions. The questions are based on the Likert scale (from 1 being the lowest point to 5 being the highest point). The validity of the questionnaire was evaluated based on the opinions and approval of professors and experts in the field of management. The criteria for selecting the experts were having an academic rank in a university and effective research activities and management experience of more than 5 years, and its reliability was also based on the test or construction reliability, that is, the composite reliability. Greater than 0.7 and the variance of each construct was rated greater than

0.5. Structural equation methods and software such as SPSS version 28 and Lisrel version 11 were used for data analysis (Fahimah et al., 2323).

**RESULTS AND DISCUSSION**

The results of the demographic data analysis showed that 78.8% of the respondents were male and 21.2% were female. Also, with regard to the professional position, 56.2% were department heads, 17% managing directors, 11% responsible experts, 9.2% deputies and above and about 7% experts (Table 1).

Regarding the dispersion and the index of fit, the Chi-score index of fit was used, the results of which can be seen in Table 2. These results show that the model fits the data well.

The results of Bartlett’s test of sample adequacy showed that the value of the KMO index is 0.879 (more than 0.7), so the number of samples (the number of respondents) is sufficient for factor analysis, and the Significance Value (Sig.) of Bartlett’s test is less than 0.05. This indicated that factor analysis is suitable to identify the structure of the factor model (Samimi et al., 2023) (Table 3).

To check the normality of the main research variables, the Kolmogorov Smirnov test was used, the results of which are shown in Table 4.

Therefore, as the results of Table 4 show, the value of the significance level of the research variables is more than 0.05, so the null hypothesis is not rejected and it can be said with 95% confidence that the data distribution in the research variables follows the normal distribution. As it can be seen in Table 2, in the

Table 1: frequency of demographic characteristics

| Demography         | Frequency |
|--------------------|-----------|
| Male               | 78.8%     |
| Female             | 21.2%     |
| Head of department | 56.2      |
| Director general   | 17%       |
| Responsible expert | 11%       |
| Expert             | 9.2%      |
| Deputy and above   | 7%        |

Table 2: Chi-square index of the model

| variable     | Chi-square | degree of freedom | chi-square/degree of freedom | level of significance |
|--------------|------------|-------------------|------------------------------|-----------------------|
| Job turnover | 65.28      | 1                 | 2.7                          | 0.000                 |
| productivity | 5.12       | 4                 | 2.578                        | 0.000                 |

Table 3: The results of sampling adequacy test (Bartlett's test is less)

| The value of the KMO statistic | Bartlett's Test      |       |
|--------------------------------|----------------------|-------|
|                                | Chi-square statistic | Sig.  |
| 0.978                          | 004.66               | 0.000 |

Table 4: Kolmogorov Smirnov test to check the normality of the research data distribution

| Variables                     | Productivity               | Job turnover               |
|-------------------------------|----------------------------|----------------------------|
| Absolute value                | 0.37                       | 0.46                       |
| Maximum differences           |                            |                            |
| Positive                      | 0.75                       | 0.26                       |
| Negative                      | 0.37                       | 0.46                       |
| Kolmogorov Smirnov statistics | 1.11                       | 1.75                       |
| Estimated significance level  | 0.64                       | 0.73                       |
| Result                        | The distribution is normal | The distribution is normal |

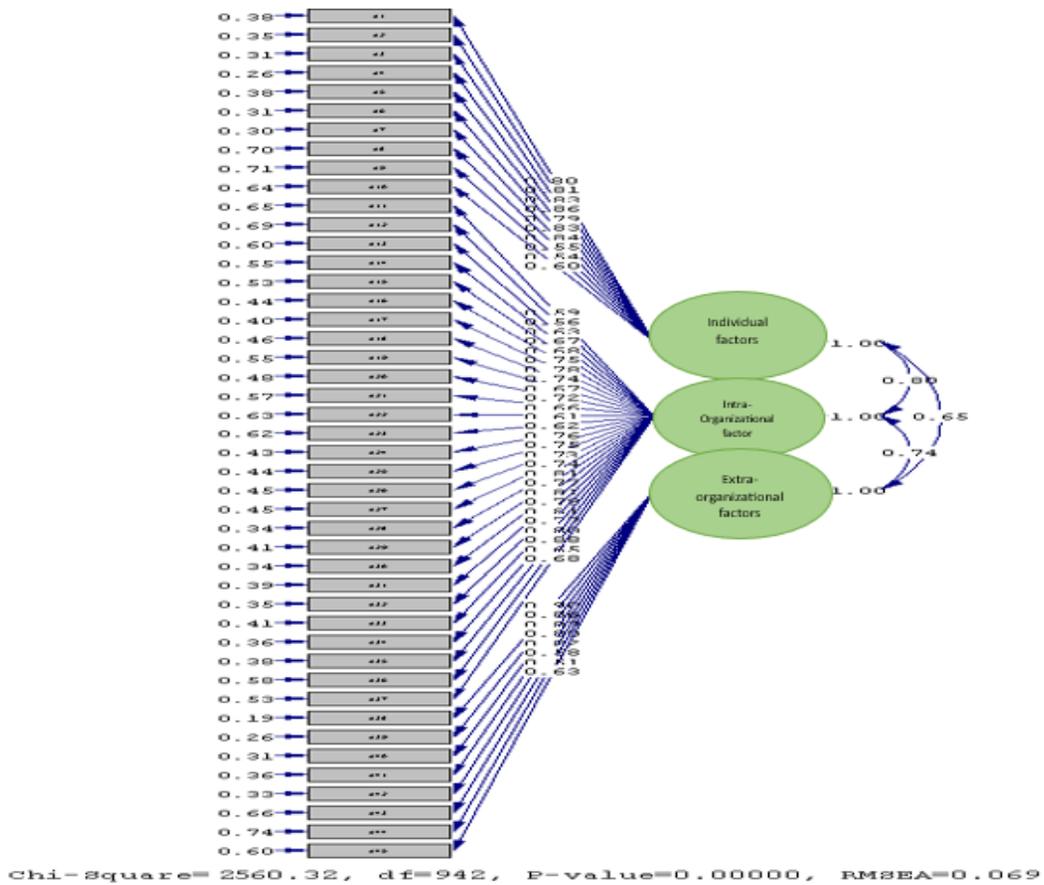


Fig. 1: First-order confirmatory factor analysis using standard regression coefficients for the turnover component model

output of Laserl software, the value of  $\frac{\chi^2}{df}$  calculated for the job turnover model is equal to 2.7. Also, with regard to the factor loading, it should be mentioned that in the default estimation mode, the factor loads of the model show the influence of each variable or

element in explaining the variance of the variable values or the principal component. In other words, the factor loading indicates the degree of correlation of each observed variable (questionnaire item) with the underlying variable (factors). According to Fig. 1,

the factor load of each of the research questions can be observed. For instance, the factor loads in the first item in the “individual factors” dimension has a factor load of 0.80.

The software output and Fig. 2 also show the significance of the obtained coefficients and parameters of the model, so all the obtained coefficients are significant.

As can be observed in Table 2, in the output of the Laserl software, the value of the calculated  $\frac{\chi^2}{df}$  for the productivity model is equal to 2.8, which is less than 3. The factor loading coefficient of the model in the

standard estimation method shows the influence of each variable or item in explaining the variance of the score of the main variable or factor. In other words, the factor loadings indicate the degree of correlation of each observer variable (questionnaire item) with the underlying variable (factors). Fig. 3, shows the factor loadings of each of the research questions. For instance, the factor loading for the item in the “effectiveness” dimension has a factor load of 0.89.

The software output and Fig. 4 also show the significance of the obtained coefficients and the model parameters where all the coefficients obtained

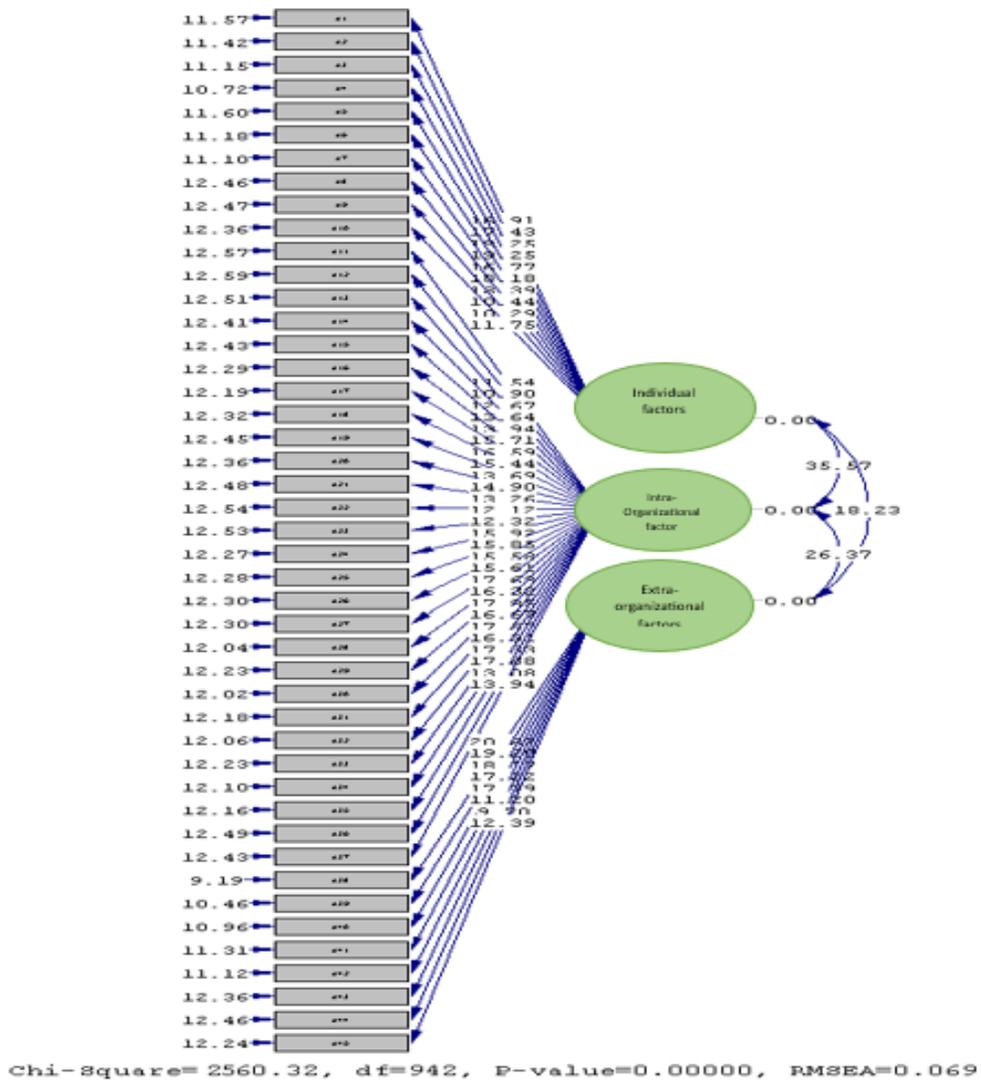
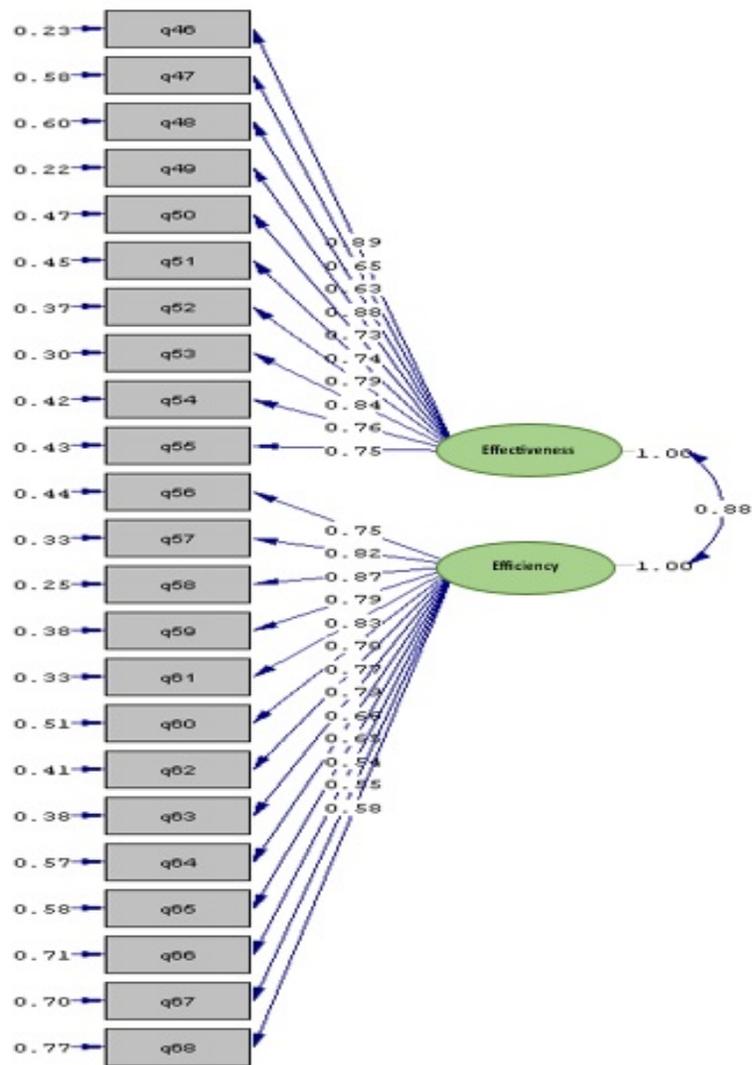


Fig. 2: First-order confirmatory factor analysis of job turnover component model with significant value of t statistic



Chi-Square=651.19, df=229, P-value=0.00000, RMSEA=0.077

Fig. 3: First Order Confirmatory Factor Analysis for Productivity Component Models Using Standard Regression Coefficients

are significant.

*Effect of Turnover Rate on Productivity*

In the presented Figs. 1 to 4, latent variables or factors and questionnaire materials are shown. As can be seen, the path model consists of 2 latent variables and 5 observed variables. Latent variables, in turn, are divided into two types of endogenous variables and exogenous variables. Each variable in the structural equation model system can be considered both an endogenous variable and an exogenous variable. An

endogenous variable is a variable that is influenced by other variables in the model. In the presented model, the job turnover variable is an exogenous variable and the productivity variable is an endogenous variable. The variable “extra-organizational factors” has a factor load of 0.83, “intra-organizational factors” has a factor load of 0.87, and “individual factors” has a factor load of 0.93. Therefore, individual factors have the greatest contribution in explaining the variance of job turnover. The variable “effectiveness” has a factor load of 0.89, and “efficiency” has a factor

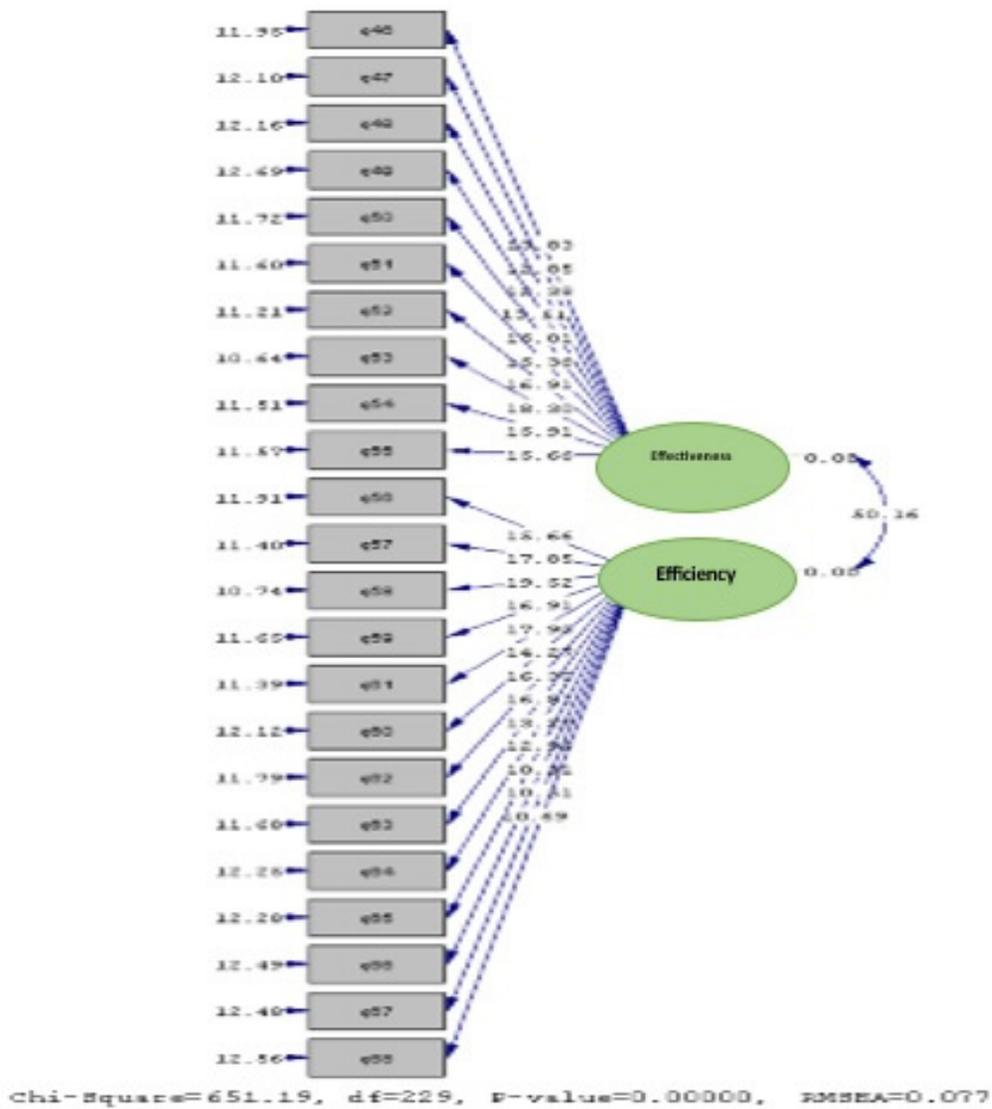
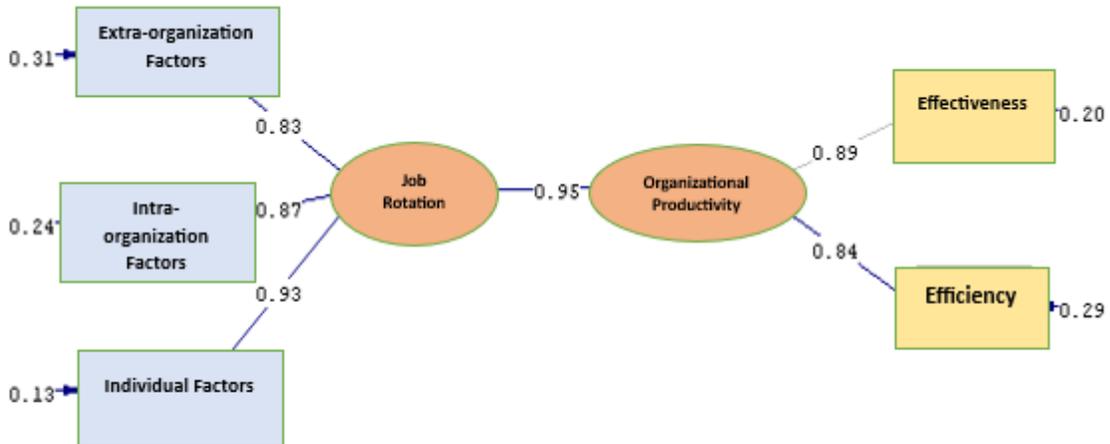


Fig. 4: First-order confirmatory factor analysis of the productivity component model with significant values for the t-statistic

load of 0.84. In other words, effectiveness has the largest contribution to explaining the variance of organizational productivity.

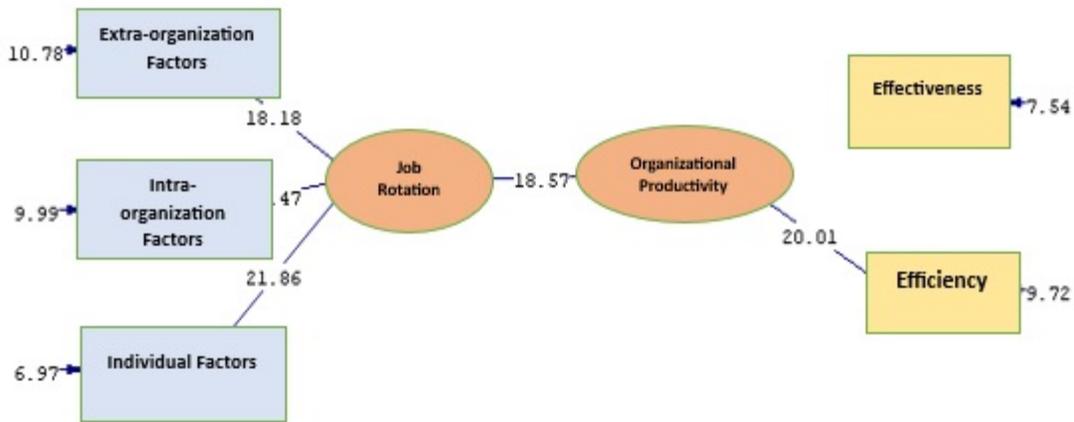
The factor loadings of the model in the default estimation mode show the influence of each variable or item in explaining the variance of the variable or principal factor values. Fig. 5 shows the factor loadings for each research variable. The effect of labor turnover on the organization's productivity is 0.95. This value indicates a strong and positive effect of labor turnover on productivity.

Fig. 6 illustrates the research model in significance mode, the obtained coefficients of each research variable and the parameters of the factor loading measurement model, and all the research variables in which all the obtained coefficients are significant. Because a significance test value greater than 1.96 or less than -1.96 indicates the significance of the relationships. The t-statistic value of labor turnover is 18.57, which is outside the range (1.96 and -1.96). Therefore, the relationship between labor turnover and organizational productivity is significant.



Chi-Square=11.50, df=4, P-value=0.00000, RMSEA=0.065

Fig. 5: Research model in standard estimation mode



Chi-Square=11.50, df=4, P-value=0.00000, RMSEA=0.065

Fig. 6: Research model in meaningful mode

*The final model of the impact of job turnover dimensions on productivity*

As it is observed in Fig. 7, in the variable model the dimensions of job turnover are exogenous variables and the productivity variables are endogenous variables.

The factor loadings of a model in standard estimation mode indicate the influence of each variable or term in explaining the variance of the variable or principal factor values. The coefficient

of influence of individual factors on human productivity is 0.71. The coefficient of influence for intra-organizational factors is 0.82. The coefficient of influence of non-organizational factors on human productivity is 0.65. Since the sign of the coefficient is positive, variable dimensions have a positive impact on productivity. According to the coefficient of effectiveness, intra-organizational have the greatest impact on productivity and extra-organizational factors have the least impact on organizational

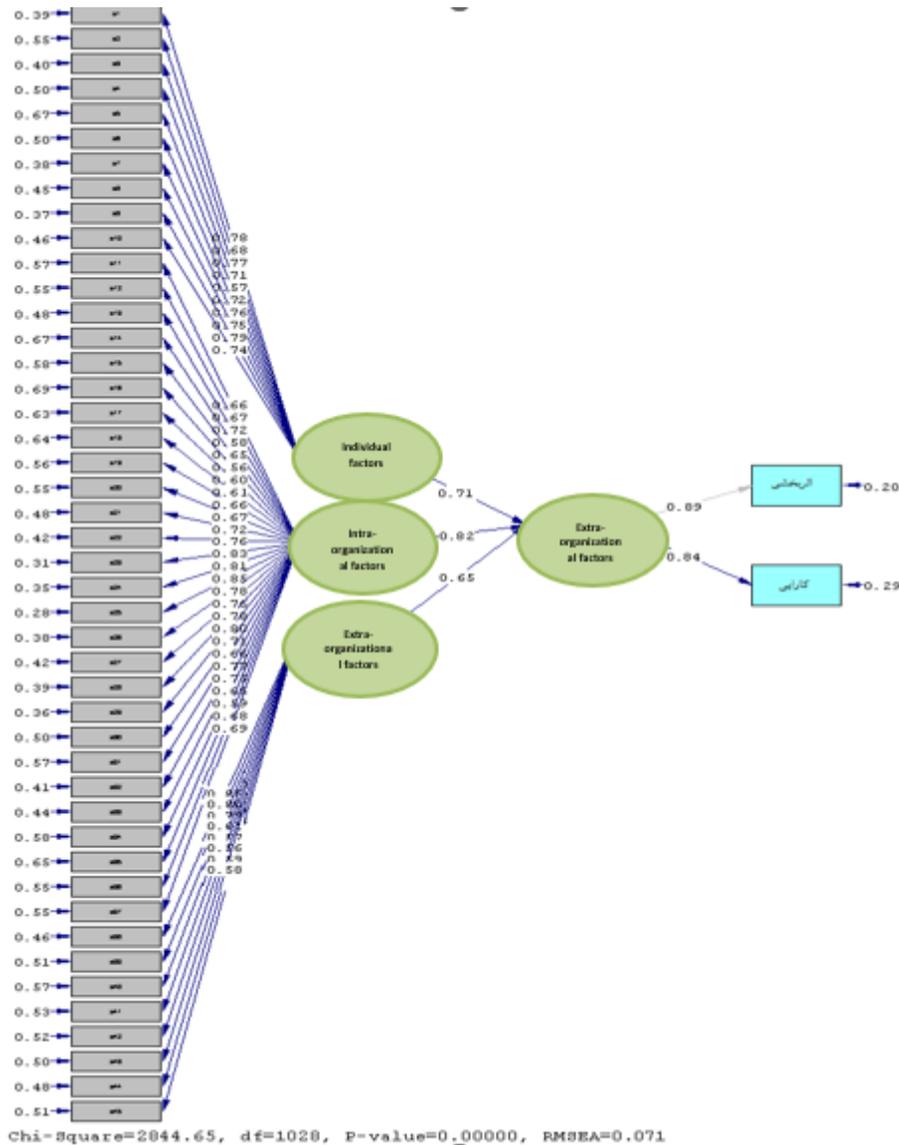


Fig. 7: Research model in standard estimation mode

productivity.

In the data extracted from the software (Fig. 8) of the model, the measurement model of the factor loadings of each of the research variables in the significance state of the obtained coefficients and parameters shows that all the obtained coefficients are significant, as the significance test value greater than 1.96 or less than -1.96 indicates the significance of the relationships. Individual factors have a t-statistic of 10.28, intra-organizational coefficients of 11.04,

and non-organizational coefficients of 9.3, which are outside the range of (1.96 and -1.96). Therefore, the link between labor turnover and organizational productivity is important. The findings and results of this research showed that the job turnover process and its components in three dimensions of individual, intra- and extra-organizational job turnover can have an impact on the organizational productivity process of the IME in two dimensions: efficiency and effectiveness. The findings of the research and

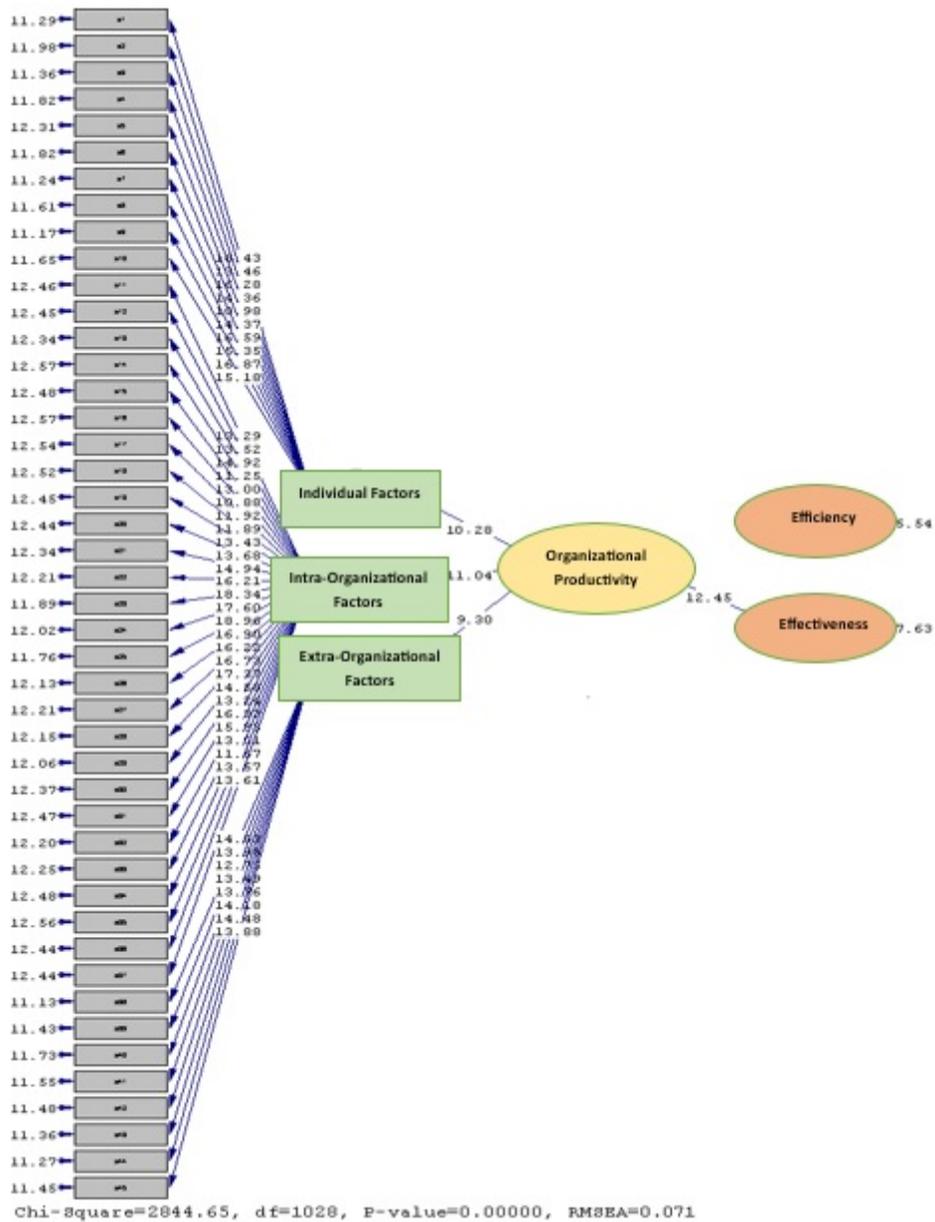


Fig. 8: Research model in meaningful mode

the results of the analyzes show some important connections as follows:

A) The coefficient of influence of intra-organizational factors on organizational productivity in the Iran’s Ministry of Education is 0.82. These findings are consistent with the findings of [Forozanfar and Ebrahimzadeh’s \(2016\)](#) study on the effect of

organizational factors on employee productivity and performance in project-oriented organizations. The result has shown that the degree of influence of organizational factors on improving employee performance based on a conceptual model consisting of three structures: development management, performance and rewards management, and

communication management has a significant and positive impact on improving employee efficiency and 86% of your improvement in workforce efficiency can be explained. Meanwhile, development management was the most effective factor in improving employee efficiency, with an impact rate of 0.472 units. In addition, the results consistent with the research of [Torabi et al. \(2014\)](#). The results also showed that the effect size of organizational factors on interest is high, with an effect size of 0.70.

B) The coefficient of influence of individual factors on organizational productivity in the IME is 0.7, which is consistent with the research findings of [Nikkhah Tokmedash and Masoumi \(2017\)](#) on the impact of internal marketing and job turnover on human resource productivity with the mediating role of organizational engagement. The results of which have shown that individual variables such as organizational engagement have a positive and significant impact on human resource productivity. The research findings of [Hariri and Etamadi \(2014\)](#) on the impact of job turnover on organizational productivity in Iran's Document Organization are also consistent with the findings of the current study, in which job turnover due to individual factors could increase the problem and productivity, problem tolerance and have a positive effect on the acquisition of new methods, increase the versatility of work, and overcome fatigue and boredom, resulting in increased work capacity and organizational productivity levels.

C) The coefficient of influence of extra-organizational factors on organizational productivity in the IME is equal to 0.65, which is in line with the results of the research by [Karimi Shahabi et al. \(2016\)](#). Organizational externality affects organizational productivity. In the research of [Azizi and Tazikeh lamsaki \(2018\)](#), the role of the environmental component has had a great effect on the productivity of employees in the office environment. [Kamalipour and Rigi's research \(2014\)](#) also considered the impact of inter-organizational and extra-organizational components on job-organizational performance and efficiency as the present research.

According to the aforementioned and relying on the findings of the research and comparing it with other studies conducted in relation to the subject, it can be said that the components affecting job turnover can play an important role in organizational productivity. The findings also showed that intra-

organizational factors, individual factors and extra-organizational factors have a positive effect on productivity. In addition, the value of t statistic for intra-organizational factors is 11.04, individual factors are 10.28, and extra-organizational factors is 9.3, which is outside the range 1.96 and -1.96. In general, it can be stated that the relationship between job turnover and organizational productivity in the IME is meaningful. So that in the process of influencing job turnover on the organizational productivity, intra-organizational components (0.82), individual components (0.71) and extra-organizational components (0.65) have the most to the least impact on organizational productivity. And the amount of this effect on productivity components is from the highest to the lowest, respectively, on effectiveness (0.89) and then efficiency (0.84).

## CONCLUSION

Job turnover and its impact on the productivity of the organization is one of the topics that has received a lot of attention in the last few decades. This importance was taken seriously not only in the economic sphere, but also in the scientific and research environment as well as in EIs. The Ministry of Education, as the trustee, decision-maker, planner and supervisor of the country's education system, is one of the institutions that must deal with the particular issue of productivity and study and study the factors that affect productivity. Therefore, given the importance of this topic on the one hand and the research gaps in this area, this research was conducted with the aim of studying the impact of job turnover and its components on the organizational productivity of the IME. The role of job turnover as an important management strategy in the development of HR to improve productivity and organizational performance, and the scientific need to study the effectiveness of this strategy in the educational field with the aim of evaluating the impact of job turnover on organizational productivity. This research was carried out for the first time in the country, based on the thematic framework and variables studied, as well as the society and organization studied, with a survey of all staff within the institution, and the results showed, the job rotation process, when implemented in three modes - individual, internal, and external - can have a significant impact on the productivity, efficiency, and organizational effectiveness of the Ministry of Education.

### *Suggestions*

The job turnover process, when implemented in three modes - individual, intra-organizational, and extra-organizational, can impact productivity, efficiency, and provide suggestions for future research.

1- Considering that organizational productivity is a crucial factor in development, particularly in terms of human resources and social capital, as well as its impact on scientific and research advancements, there is a growing interest in scientific and academic research in relation to broaden the scope of productivity studies beyond commercial, economic, and financial fields and extend its application to educational and research domains. Such an expansion can have significant positive effects on enhancing organizational performance and employee productivity.

2) In terms of the significance of manpower and human capital, as well as their dynamics and transformation, and the necessity of continuous job rotation within organizations, educational-oriented institutions, scientific and academic institutions can take an important step by defining research priorities related to investigating factors that affect productivity in scientific and educational organizations. This will pave the way for studies and examinations of the productivity process in educational and research centers.

3- Considering the importance of human resources and capital, particularly professors, teachers, and trainers, and the optimal utilization of their experiences and talents, conducting research on the impact of job turnover on scientific and educational productivity in educational institutions, including elementary, middle, and high schools, can yield numerous benefits and practical applications for maximizing their capacity and potential. This, in turn, will enhance productivity in these institutions.

### *Limitations*

In general, there were limitations and obstacles in conducting this research, the most important of which were the research gaps in the field of investigating the process of job turnover on organizational productivity in EIs, the lack of clarity in the indicators of measuring and evaluating productivity in educational institutions,

especially in the IME, limitations in achieving macro-educational and educational policies, difficulty in accessing to the long-term plans, goals and models developed by the Ministry of Education, lack of plans and programs to improve organizational productivity and patterns governing the job turnover process in the Ministry of Education. Given the importance of HR and its dynamics and development, as well as the need for continuous job turnover in organizations, education-based institutions such as scientific and academic institutions can also examine the problem by considering other variables to pave the way for better productivity

### **AUTHOR CONTRIBUTIONS**

M. Amjadian; N. Mirsepassi and M.J. Kameli designed the model and the computational framework and analyzed the data. All the authors conceived the study and were in charge of the overall direction and planning.

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### **CONFLICT OF INTEREST**

The authors declare no potential conflict of interest regarding the publication of this work. In addition, the ethical issues including plagiarism, informed consent, misconduct, data fabrication and, or falsification, double publication and, or submission, and redundancy have been completely witnessed by the authors.

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#### **ABBREVIATIONS**

|            |                              |
|------------|------------------------------|
| <i>ELs</i> | Educational Institutions     |
| <i>HR</i>  | Human Capital                |
| <i>IME</i> | Iran's Ministry of Education |

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